

FOR 6th YEAR



By
WAEEL METWALY SAYED

VISIT...

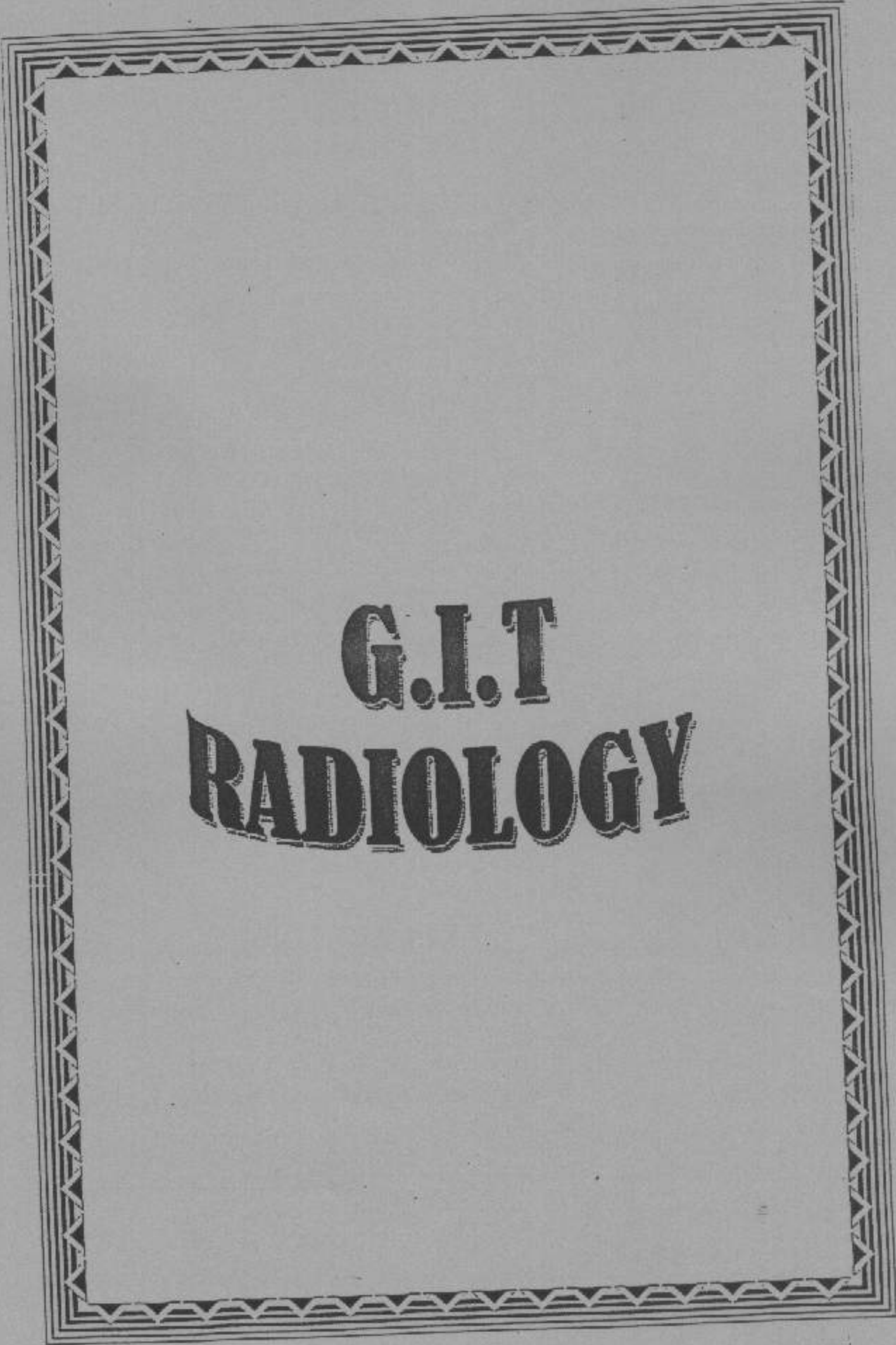
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With my Best Wishes
Dr. Wael Metwaly

Tel : 7228206
Mob : 012 2466443

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G.I.T RADIOLOGY

Chapter (1)

1

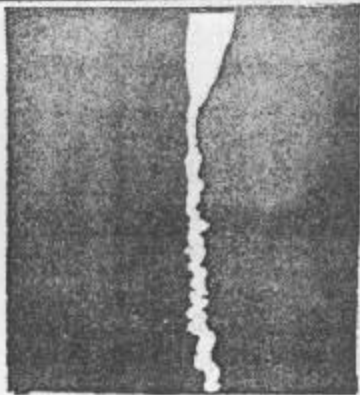
I

The Oesophagus

★ Criteria of Normal Oesophagus in Ba. Swallow:

- About 20-30 Barium is used.
- Shape of oesophagus
 - Nearly straight Course
 - Width Near by 1 Finger Breadth.
- it is used for
 - ① Corrosive Stricture.
 - ② Achalasia of the Cardia.
 - ③ Carcinoma of the Oesopagus.
 - ④ Oesophageal Varices.



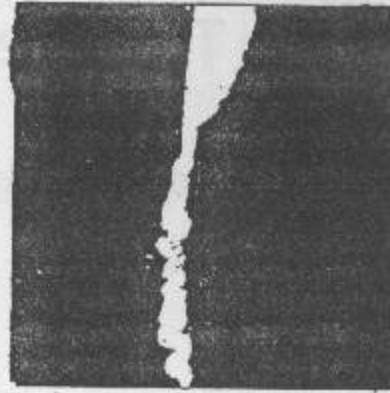
① Corrosive Stricture	② Achalasia of Cardia	③ Cancer Oesophagus
 ■ <u>Strictures</u> start High at upper 1/3 then diffused downwards ■ Slight irregularity with gradual tapering ■ <u>No</u> dilatation above strictures	 ■ <u>Stricture</u> present below diaphragm ■ Smooth pencil shaped or Parrot beak shaped ■ <u>Marked</u> dilatation above stricture.	 ■ Stricture usually at middle 1/3 ■ Irregularity & Rat tail appearance with shouldering ■ <u>Slight</u> dilatation above stricture.

④ Oesophageal Varices

Appears as multiple, rounded, oval or longitudinal filling defects affecting whole oesophagus.
With "Grape like Appearance"



1 Corrsive Stricture



① This X-ray is :

- a. Barium Swallow.
- b. Barium Meal
- c. Plain X-ray chest
- d. None of the above

② This Lesion is :

- a. Congenital.
- b. Traumatic
- c. Inflammatory
- d. Neoplastic.

③ The most common age group is:

- a. New born
- b. Children.
- c. Adolescents.
- d. Middle age.
- e. Old age

④ The presentations including the following, Except:

- a. Dysphagia.
- b. Bad general condition.
- c. Respiratory complications.
- d. Vomiting.

⑤ The most common symptom is:

- a. Dysphagia.
- b. Retrosternal pain
- c. Haematemesis.
- d. Neck swelling.
- e. Vomiting.

⑥ All are Complications, Except :

- a. Aspiration Pneumonia.
- b. Mediastinitis.
- c. Haematemesis.
- d. Malignant Transformation

⑦ In Acute phase, Management is:

- a. Washing by water.
- b. Washing by Egg.
- c. Washing by white starch
- d. All of the above.

⑧ In Acute Phase, Patients is manged with All, Except :

- a. Steroids
- b. Sedatives.
- c. Tracheostomy.
- d. Endoscopic dilatation.
- e. Antibiotics.

⑨ Drugs used in Acute phase include All, Except :

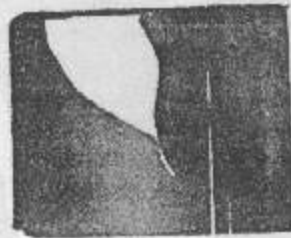
- a. Antacids.
- b. Immuno-suppressive drugs.
- c. Chemical Antidote.
- d. Antibiotics.

⑩ Chronic Cases are commonly Treated by:

- a. Medical.
- b. Endoscopic dilatation
- c. Surgery.
- d. Radiotherapy.
- e. Hormonal Therapy.

2

Achalasia of the Cardia



① This X-ray is :

- a. Barium X-ray Chest.
- b. Barium Meal
- c. Barium swallow.
- d. Bronchogram.

② This Following is observed:

- a. Parrot-beak sign.
- b. Stricture middle 1/3 oesophagus
- c. Filling defects in the oesophagus
- d. Shouldring sign.

③ The lesion commonly precipitated by:

- a. Absence of Auerbach's plexus
- b. Absence of Meissner's plexus
- c. Cardiospasm
- d. All of the above
- e. None of the above

④ Mode of Presentation include:

- a. Dysphagia to Fluids.
- b. Regurgitation.
- c. Pointing sign.
- d. Good general Health.
- e. All of the above.

⑤ The Patient presents clinically with all, Except:

- a. Dysphagia to Fluids.
- b. Regurgitation.
- c. Dehydration..
- d. Intermittent course.
- e. Retrosternal pain.

⑥ The Earliest presentation is:

- a. Dysphagia to Fluids.
- b. Regurgitation.
- c. Dysphagia to Fluids & Solids.
- d. Retrosternal pain.

⑦ Complication(s) include:

- a. Inhalation Pneumonia
- b. Retention gastritis.
- c. Perforation.
- d. All of the above

⑧ The Most diagnostic investigation is:

- a. Barium Swallow.
- b. Ultrasound.
- c. PH Monitoring.
- d. Manometric studies.
- e. None of the above.

⑨ Drug which may be used for Treatment :

- a. Octyl Nitrate.
- b. Beta adrenergic blocker.
- c. H₂ Blockers.
- d. All of the above.
- e. None of the above.

⑩ The principle line of Treatment is :

- a. Anti-spasmodics.
- b. Endoscopic dilation.
- c. Heller's cardiomyotomy operation.
- d. Ramsted's pyloromyotomy operation.
- e. Oesophagp-gastrectomy.

3 Cancer Oesophagus



① This X-ray is :

- a. Barium Meal.
- b. Barium Swallow.
- c. Plain X-ray Chest
- d. Translumbar Aortography.

② This Lesion is:

- a. Congenital.
- b. Traumatic.
- c. Inflammatory.
- d. Neoplastic.
- e. Others

③ This Lesion is mostly:

- a. Achalasia of the Cardia.
- b. Corrosive Stricture.
- c. Malignant Stricture.
- d. Oesophageal Varices.

④ The Commonest M/E is:

- a. Squamous Cell Carcinoma.
- b. Adenocarcinoma.
- c. Anaplastic Carcinoma.
- d. Transitional Cell Carcinoma.

⑤ Predisposing Conditions don't include:

- a. Achalasia of Cardia.
- b. Barrett's Oesophagus.
- c. Reflux Oesophagitis.
- d. Caustic burn of Oesophagus.
- e. Congenital Atresia.

⑥ The patient presents clinically with all, Except:

- a. Dysphagia to solids.
- b. Haematemesis & Melena.
- c. Palpable Tumor.
- d. Palpable Lt. Supra-clavicular mass.

⑦ The Diagnostic procedure of choice is:

- a. CT Scan Chest
- b. Tumor markers.
- c. Oesophagoscopy & Biopsy.
- d. Manometric Studies.

⑧ The Ideal Treatment is:

- a. Radical Surgery if operable.
- b. Giving the proper Antidote.
- c. Nissen's Fundoplication.
- d. Heller's operation.
- e. None of the above.

⑨ The Palliative line of Treatment:

- a. Chemotherapy.
- b. Radiotherapy.
- c. Gastrostomy.
- d. Celastine intubation.
- e. Palliative surgery.

⑩ If Lesion at lower 1/3, all the followings are removed with Treatment, Except :

- a. Whole Oesophagus.
- b. Upper Stomach.
- c. Spleen & Tail of pancreas.
- d. Coliac L.Ns.

4

Oesophageal Varices



① This X-ray is :

- a. Barium. Swallow
- b. Plain X-ray Chest
- c. Angiogram.
- d. None of the above.

② The Following is observed:

- a. Multiple Filling defects in Oesophagus.
- b. Stricture in the lower end.
- c. Shouldring sign.
- d. None of the above.

③ This Condition can results from all the following Except:

- a. Neonatal umbilical sepsis.
- b. Portal vein thrombosis.
- c. Liver metastasis.
- d. Bilharzial Fibrosis
- e. Liver Cirrhosis.

④ Patient can represents with all Except:

- a. Dyspepsia.
- b. Haematemesis & Melena.
- c. Abdominal mass.
- d. Dysphagia.

⑤ Abdominal Signs don't include:

- a. Rt. Hypochondrial swelling .
- b. Ascites.
- c. Lt. Hypochondrial swelling.
- d. A mass in Rt. Iliac fossa.
- e. Venous hum

⑥ Investigations don't include:

- a. I.V.P
- b. Serum Alkaline phosphatase.
- c. Serum Creatinine.
- d. Serum Amylase.
- e. Ultrasonography.

⑦ The line of Treatment during Active bleeding:

- a. Sedatives.
- b. Sungestaken Tube.
- c. Injection Sclerotherapy
- d. Shunts Operation.

⑧ All can be given to patient with Active bleeding, Except:

- a. Fresh blood Transfusion.
- b. Repeated Enema.
- c. Lactulose.
- d. Morphine.

N.B.

Spleno-portography:

The same questions



5

Oesophageal Atresia



(A) AP view.



(B) Lateral view.

① This X-ray is

- a. Plain x-ray.
- b. Barium Swallow
- c. Barium Meal
- d. None of the above.

② Type of study is :

- a. Barium.
- b. Lipidol.
- c. Gastro-graffin.
- d. None of the above.

③ The Aetiology :

- a. Congenital.
- b. Traumatic.
- c. Inflammatory.
- d. Neoplastic.

④ The patient complaining of all except:

- a. Excessive salivation.
- b. Pulmonary complications.
- c. Dysphagia.
- d. Vomiting.

⑤ The Patient presents clinically with all. Except :

- a. Frothy saliva.
- b. Bronchopneumonia.
- c. Acid pneumonia.
- d. Dehydration.

⑥ The age of patient :

- a. Neonate.
- b. Child.
- c. Adult.
- d. Old.

⑦ Type of lesion may be :

- a. With fistula.
- b. Without fistula.
- c. a or b
- d. None of the above

⑧ Associated congenital anomalies :

- a. Spina bifida.
- b. ASD or VSD.
- c. Polycystic kidney.
- d. All of the above.

⑨ Investigation of choice :

- a. Injection of lipidol.
- b. Catheter introduction.
- c. Fibroptic endoscopy.
- d. None of the above.

⑩ The principle line of Treatment is

- a. Dilatation.
- b. Heller's operation.
- c. Radical excision.
- d. Ligation of fistula & restoration of continuity.

Answers



1 Corrosive Stricture

- | | | | | |
|------|------|------|------|-------|
| 1. a | 2. b | 3. b | 4. d | 5. a |
| 6. c | 7. d | 8. d | 9. c | 10. b |

2 Achalasia of Cardia

- | | | | | |
|------|------|------|------|-------|
| 1. c | 2. a | 3. a | 4. e | 5. c |
| 6. a | 7. a | 8. d | 9. a | 10. c |

3 Cancer Oesophagus

- | | | | | |
|------|------|------|------|-------|
| 1. b | 2. d | 3. c | 4. a | 5. e |
| 6. c | 7. c | 8. a | 9. d | 10. d |

4 Oesophageal Varices

- | | | | | |
|------|------|------|------|------|
| 1. a | 2. a | 3. c | 4. d | 5. d |
| 6. d | 7. c | 8. d | | |

5 Oesophageal atresia

- | | | | | |
|------|------|------|------|-------|
| 1. d | 2. b | 3. a | 4. d | 5. c |
| 6. a | 7. c | 8. d | 9. c | 10. d |

II

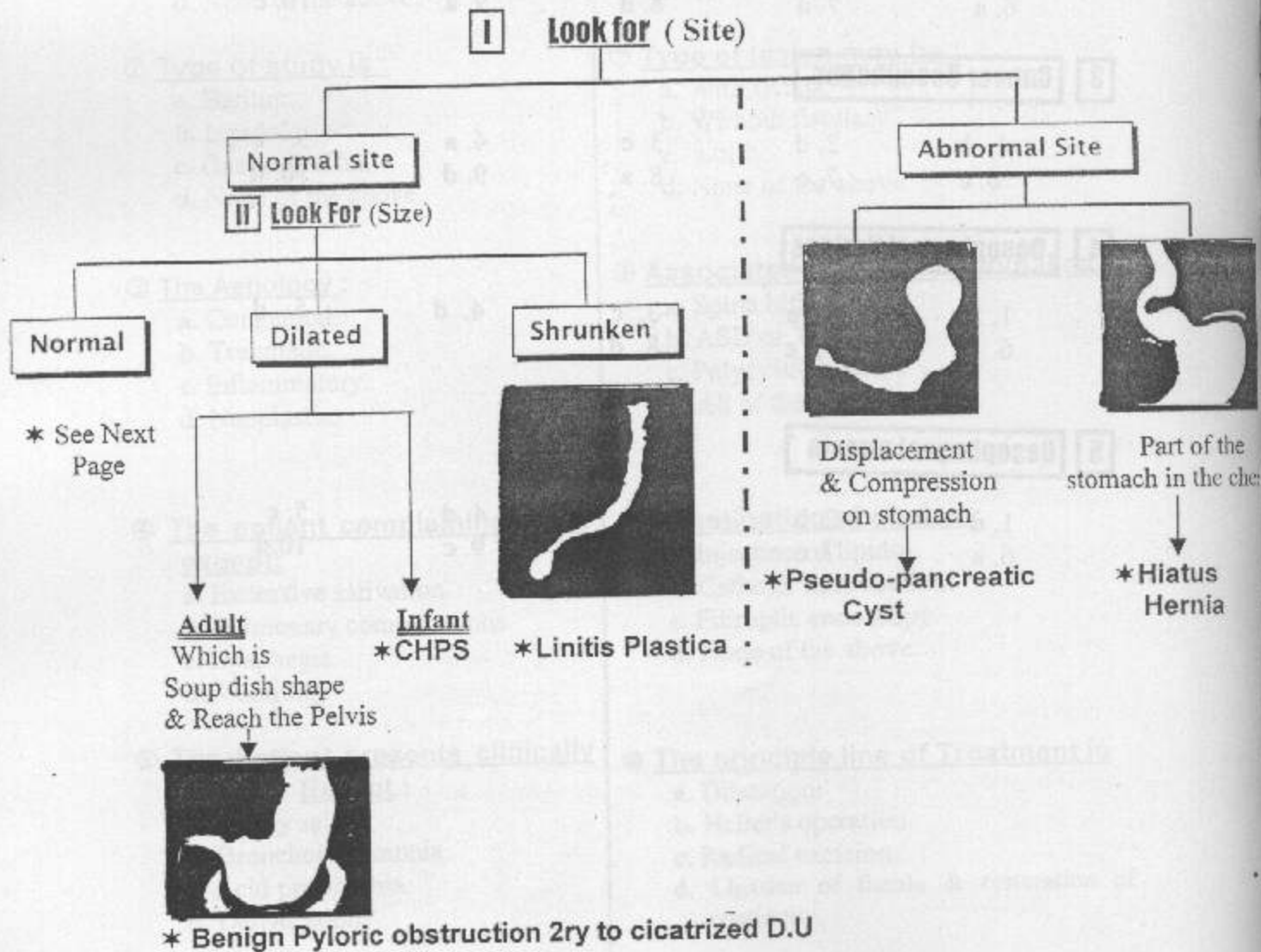
The Stomach & Duodenum

★ Criteria of Normal Stomach in Ba. Meal:

- **About** 200-300 Barium is used.
- **Shape of stomach:** J. shaped.
 - **Lesser Curve:** Smooth continuous line
 - **Greater Curve:** Seriated
 - **Pyloric part:** Rounded & smooth
 - **Duodenal Cap:** [1 inch of 1st part of duodenum, nearly triangular with smooth outlines
- **If Fundus filled with smooth outlines barium** this means Trendelenburg's position which is indicated with Hiatus Hernia or Fundal Lesion



How to Diagnose Ba. Meal



Normal Size

III Look at (Lesser Curve)

For out-pouching i.e Barium is seen Outside the Line of gastric wall i.e Ulcer Niche

- Ve

+ Ve

IV Look For

Duodenal Cap for deformity



* Benign Gastric Ulcer

- Ve

V Look For

Greater curve or pyloric part For any Filling defects

+ Ve



* Chronic Duodenal Ulcer



* Cancer Pylorus



* Cancer body (Ulcer)



* Cancer body (Mass)

N.B

Erect (Plain X-ray)

Demonstrating air Under Diaphragm
= Acute Perforated D.U.
= Pneumoperitoneum



1 Hiatus Hernia

(Sliding type)

- Part of stomach in the chest i.e Abnormal Site



① This X-ray is:

- Barium Meal, Upright position.
- Barium meal, Trendlenburg's position.
- Barium Swallow.
- Barium Enema.

② Aetiological Factors don't include:

- Aging.
- Pregnancy.
- Obesity.
- Neuromuscular incoordination.

③ The patient represents: with all, Except:

- Dysphagia.
- Dyspnea.
- Dyspepsia.
- Heart burn.
- Abdominal distention.

④ The most common presentation is:

- Haematemesis.
- Dysphagia.
- Heart burn.
- Regurgitation.
- Dyspepsia.

⑤ It may be associated with:

- Gall stones only.
- Diverticulosis coli only.
- a & b
- Non of the above.

⑥ The most diagnostic investigation is:

- Barium Swallow.
- Typical History of Heart burn.
- Endoscopy.
- P.H & Manometric studies.

⑦ The principle line of treatment is:

- Medical treatment.
- Endoscopic dilatation.
- Nissen's fundoplication.
- Belsy Mark IV
- None of the above.

⑧ If severe Lesion with short oesopagus the operation of choice is:

- Gastric resection.
- Colon by-pass.
- Nissen's fundoplication.
- Heller's operation.
- Ramstedt's operation.

N.B.

Para-oesophageal hernia :

- Presence of gastric fundus in Lt. Haemothorax.
- No heart burn i.e. No reflux.
- Treatment : surgical correction.



2 Pseudo-pancreatic cyst

- Displacement & Compression on stomach i.e Abnormal Site.



- ① This X-ray is:
 - a. Barium Meal.
 - b. Barium Swallow.
 - c. An Invertogram
 - d. Barium Enema.
 - e. None of the above.
- ② The Aetiology of this case is:
 - a. Congenital.
 - b. Malignant.
 - c. Following Acute pancreatitis.
 - d. All of the above
 - e. None of the above.
- ③ Fat of this condition:
 - a. Spontaneous resolution 20- 40%.
 - b. Malignant Transformation.
 - c. Resolution in 100%.
 - d. All of the above.
 - e. None of the above.
- ④ Complications don't include:
 - a. Rupture..
 - b. Haemorrhage.
 - c. Malignancy.
 - d. Abscess.
 - e. C B D obstruction.
- ⑤ Mode of presentation include :
 - a. History of Pancreatitis.
 - b. Epigastric large mass.
 - c. Fixed & Tense cystic mass.
 - d. Mass shows Intermittent pulsation.
 - e. All of the above.
- ⑥ DD Include :
 - a. Abdominal Aortic Aneurysm.
 - b. B Pericolic mass.
 - c. Appendicular mass.
 - d. All of the above.
- ⑦ Investigation of choice is:
 - a. Barium Meal.
 - b. Abdominal U/S.
 - c. ERCP.
 - d. MRI.
 - e. Celiac Angiography..
- ⑧ Surgical procedure include:
 - a. Trans-gastric Cysto-gastrostomy..
 - b. Total excision of sac.
 - c. Subtotal gastrectomy.
 - d. Gastro-Jejunostomy.
 - e. None of the above.

3 Linitis Plastica

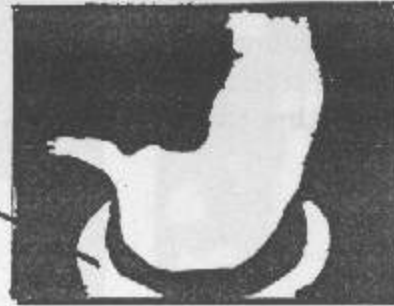
- Normal Site.
But Shrunken in Size & Diffusely
- M.C.Q = See Cancer Stomach



4 Pyloric stenosis

Due to cicatrized chronic D.U.

- Normal Site.
- Dilated in Size
(Soup dish & reaching the pelvis)



① This X-ray is:

- a. Barium Swallow.
- b. Barium Meal.
- c. Barium Enema
- d. None of the above.

② The following is observed:

- a. Soup-dish sign.
- b. A filling defect in the stomach.
- c. Ulcer niche on Lesser Curve.
- b. All of the above.
- e. None of the above.

③ The most accepted diagnosis is:

- a. Acute gastric dilatation.
- b. Congenital pyloric stenosis.
- c. Chronic duodenal ulcer.
- e. Malignant pyloric stenosis.

④ The patient represents clinically with All, Except:

- a. Vomiting.
- b. Constipation.
- c. Tetany .
- d. biliary vomiting..

⑤ The followings are complications Except:

- a. Dehydration.
- b. Tetany.
- c. Respiratory complications.
- d. Hyperchloremic Acidosis.

⑥ The condition may be associated with:

- a. Hyperkalemia.
- b. Hypernatraemia.
- c. Metabolic Acidosis.
- d. Metabolic Alkalosis.

⑦ Clinical Findings include :

- a. Visible peristalsis.
- b. Abdominal fullness.
- c. Succussion splash.
- d. All of the above.
- e. None of the above.

⑧ The most diagnostic investigation is:

- a. CT Scan.
- b. Barium Meal.
- c. Endoscopy.
- d. Electrolyte Estimation.
- e. Gastric Function Tests.

⑨ The gastric function Tests in this condition reveal:

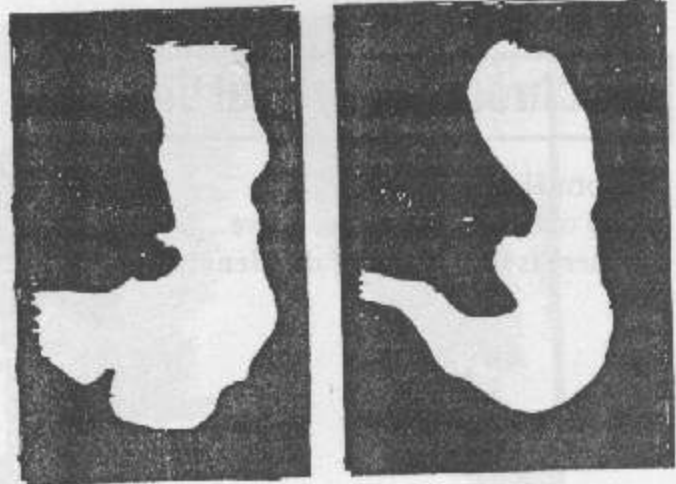
- a. Hyperacidity (True).
- b. Hyperacidity (False).
- c. Hypoacidity
- d. Normoacidity.

⑩ The principle Line of treatment is:

- a. Medical Antiacide.
- b. Ryle's Tube.
- c. Trunkal vagotomy + gastro-jejunostomy.
- d. Gastro-Jojunostomy alone.
- e. Subtotal gastrectomy.

5 Bening Gastric ulcer

- Normal Site.
- Normal Size.
- With ulcer niche on lesser curve.
- ± Ulcer notch on greater curve.



① This X-ray is:

- a. Barium Meal (Trendlenburg's).
- b. Barium Meal (Upright position).
- c. Barium Enema.
- d. None of the above.

② The Following Sign is observed:

- a. Ulcer Niche.
- b. Hour-glass stomach.
- c. Tea-pot stomach.
- d. Soup dish stomach.
- e. None of the above.

③ All may be Aetiology Except:

- a. N. S. A. Ds.
- b. Biliary gastritis.
- c. Cancer Stomach.
- d. Helico-bacter Infection.

④ The patient represents Clinically with, Except:

- a. Vomiting.
- b. Constipation.
- c. Periodic dyspepsia.
- d. Haematemesis.

⑤ The Following may be associated, Except:

- a. Duodeno-gastric reflux.
- b. Achlorahydria.
- c. Low mucosal resistance.
- d. Helico-bacter pylori.

⑥ All are possible Complications Except:

- a. Bleeding.
- b. Perforation.
- c. Obstruction of pylorus.
- d. Malignancy

⑦ This Lesion is:

- a. Type I.
- b. Type II.
- c. Type III.
- d. Type IV.

⑧ The Investigation of choice:

- a. Gastric Function Test.
- b. Barium Meal.
- c. Gastroscopy & Biopsy.
- d. Blood picture.
- e. All of the above.

⑨ Gastric function Test Commonly reveal:

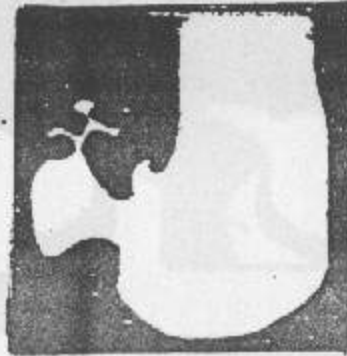
- a. True Hyperacidity.
- b. False Hyperacidity.
- c. Normoacidity.
- d. Achlorohydria.

⑩ The 1st Treatment to try is:

- a. Surgical.
- b. Medical.
- c. Physiotherapy.
- d. Endoscopic.
- e. Psychotherapy.

6 Chronic Duodenal Ulcer

- Normal Site & Size.
- No out-pouch at Lesser curve.
- There is deformity of duodenal cap.



- ① This X-ray is:
 - a. Barium Meal.
 - b. Barium Enema.
 - c. Barium Swallow.
 - d. None of the above.
- ② The Following is observed:
 - a. Normal duodenal Cap.
 - b. Deformed duodenal Cap.
 - c. Filling defect in 2nd part.
 - d. Widened duodenal Curve.
 - e. None of the above.
- ③ This disease is more Frequent in:
 - a. Female
 - b. Blood group A.
 - c. Smokers.
 - d. All of the above.
- ④ All are predisposing Factors For This Lesion Except:
 - a. Vagal over-tone.
 - b. N.S.A.Ds.
 - c. Helico-bacter infection.
 - d. Biliary gastritis.
- ⑤ The patient presents clinically with:
 - a. Epigastric pain.
 - b. Vomiting.
 - c. Haematemesis.
 - d. Melena.
 - e. All of the above.
- ⑥ The patient is liable for all these complications, Except:
 - a. Haematemesis.
 - b. Malignant Transformation.
 - c. Perforation.
 - d. Pyloric obstruction.
- ⑦ The Investigation of choice is :
 - a. Endoscopy.
 - b. Gastric Function Test.
 - c. Barium Meal.
 - d. None of the above.
- ⑧ The Gastric function Test in this Condition reveal :
 - a. Hyperacidity
 - b. Normoacidity.
 - c. Achlorohydria.
 - d. Hypochlorohydria.
- ⑨ The Principle Line of Treatment is:
 - a. Medical Antiacids.
 - b. Trunkal Vagotomy.
 - c. Partial gastrectomy.
 - d. Antrectomy.
- ⑩ The Following operation not done:
 - a. Trunkal Vagotomy & Drainage.
 - b. Selective Vagotomy & Drainage.
 - c. Highly Selective Vagotomy & Drainage.
 - d. Vagotomy & Antrectomy.
 - e. Subtotal Gastrectomy.

7 Acute perforated D.U

- Plain X-ray
with Air under diaphragm.



① This X-ray is:

- a. Plain X-ray abdomen erect position.
- b. Barium Meal.
- c. I.V.P.
- d. None of the above.

② The following is observed:

- a. Air under diaphragm.
- b. Multiple fluid level.
- c. Radio – opaque shadow.
- d. All of the above.
- e. None of the above.

③ The commonest cause is:

- a. Acute perforated chronic D.U.
- b. Acute gastritis.
- c. Perforated Acute Appendicitis.
- d. Perforated Diverticulosis Coli.
- e. None of the above.

④ The condition is predisposed by:

- a. Worry & stress.
- b. Too much work.
- c. All of the above.
- d. None of the above.

⑤ The incidence is:

- a. 10-15%.
- b. 20%.
- c. 5%.
- d. 80%.
- e. 60%.

⑥ Complications include:

- a. Shock.
- b. Toxaemia.
- c. Paralytic Ileus.
- d. Fluid & Electrolytes imbalance.
- e. All of the above.

⑦ Clinical findings don't include:

- a. Shock
- b. Dead silent abdomen.
- c. Board like rigidity.
- d. Obliteration of liver dullness.
- e. Hyperaudible borborgmi sounds.

⑧ Clinical Finding may be:

- a. Abdominal peristalsis.
- b. Olive – like abdominal mass.
- c. Tender & Rigid Rt. iliac fossa.
- d. All of the above.
- e. None of the above.

⑨ Treatment consists of:

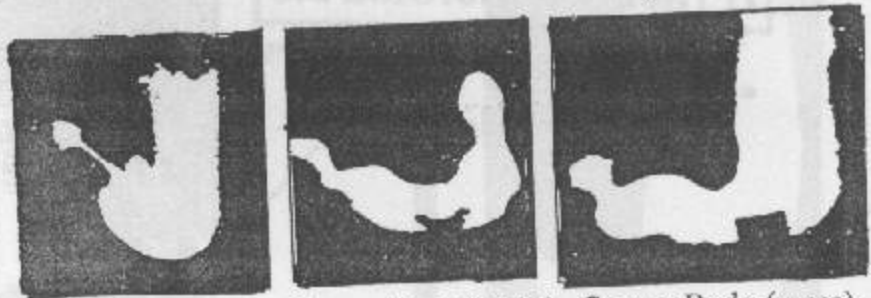
- a. Conservative.
- b. Urgent surgery.
- c. Endoscopic.
- d. All of the above.
- e. None of the above.

⑩ Surgical procedure include:

- a. Simple closure of perforation.
- b. Vogotomy & pyloroplasty.
- c. Partial gastrectomy.
- d. Total gastrectomy.
- e. All of the above.

8 Cancer stomach

- Normal Site & Size
- Normal duodenal cap.
- Filling defect at greater curve or pylorus.



Cancer Pylorus Cancer Body (ulcer) Cancer Body (mass)

① This X-ray is:

- Barium Meal.
- Barium Swallow.
- Barium Enema.
- None of the above.

② The following Sign is observed:

- Outpouch of contrast from stomach.
- Filling defect in the stomach.
- Hour-glass stomach.
- Ulcer Niche.
- None of the above.

③ The commonest predisposing Factor is:

- Plummer vinson syndrome
- Pernicious Anaemia.
- Biliary gastritis.
- Benign tumors.
- All of the above.

④ The commonest M/E is:

- Adenocarcinoma.
- Squamous Cell Carcinoma.
- Lymphoma.
- None of the above.

⑤ The patient presents with all Except:

- Epigastric mass.
- Marked anaemia.
- Bilious vomiting.
- Melena.

⑥ Clinical Findings may include:

- Jaundice.
- Ascites.
- Trousseau sign.
- Troisier sign.
- All of the above.

⑦ All are complications Except:

- Haematemesis.
- Perforation.
- Jaundice.
- Krukenburg's tumor.
- Rt. Supra-clavicular L.Ns.

⑧ The diagnostic procedure of choice is:

- CT scan abdomen.
- Barium Meal.
- Endoscopy & Biopsy.
- All of the above.

⑨ The Acidity is:

- Hypoacidity.
- Normoacidity.
- Hyperacidity.
- Anacidity.

⑩ If lesion at pylorus, the line of surgical Treatment is:

- Total Radical Gastrectomy.
- Subtotal gastrectomy.
- Gastro-jejunostomy.
- Chemotherapy or Radiotherapy.

11 Palliative procedures don't include:

- a. Total gastrectomy.
- b. Gastro-jejunostomy.
- c. Feeding jejunostomy.
- d. Subtotal gastrectomy.

12 The mostly used chemotherapy:

- a. Endoxan.
- b. Methotrexate.
- c. 5 fluoro-uracil.
- d. Vincristine.
- e. None of the above.

Answers



1 Hiatus Hernia

- | | | | | |
|-------|------|------|------|------|
| 1. b | 2. d | 3. e | 4. c | 5. c |
| 6. d. | 7. a | 8. c | | |

2 Pseudo-pancreatic Cyst

- | | | | |
|------|------|------|------|
| 1. a | 2. c | 3. a | 4. c |
| 5. e | 6. a | 7. b | 8. a |

3 Linitis Plastica

M.C.Q = See Cancer stomach.

4 Pyloric Stenosis (Adult)

- | | | | | |
|------|------|------|------|-------|
| 1. b | 2. a | 3. c | 4. d | 5. d |
| 6. d | 7. d | 8. c | 9. a | 10. c |

5 Benign gastric Ulcer

- | | | | | |
|------|------|------|------|-------|
| 1. b | 2. a | 3. c | 4. b | 5. b |
| 6. c | 7. a | 8. c | 9. c | 10. b |

6 Chronic duodenal Ulcer

- | | | | | |
|------|------|------|------|-------|
| 1. a | 2. b | 3. c | 4. d | 5. e |
| 6. b | 7. a | 8. a | 9. a | 10. c |

7 Acute perforated D.U

- | | | | | |
|------|------|------|------|-------|
| 1. a | 2. a | 3. a | 4. d | 5. a |
| 6. e | 7. e | 8. c | 9. b | 10. a |

8 Cancer stomach

- | | | | | | |
|------|------|------|-------|-------|-------|
| 1. a | 2. b | 3. e | 4. a | 5. c | 6. e |
| 7. e | 8. c | 9. d | 10. b | 11. a | 12. c |

III

The Biliary Tract

Introduction

Gall Stones

Classifications.

A) Old Classification:

- Bile Pigment 8%
- Mixed stones 80%
- Ca Carbonate 2%
- Cholesterol 10%

B) New Classification:

①	Types	Cholesterol Stones		Pigment Stones	
		Type I	Type II	Black	Brown
②	Incidence	90%	7%	3%	
③	Composition	• Cholesterol + Ca bilirubin Ca palmitat	• Pure cholesterol	• Ca bilirubin	• Ca bilirubin + Ca palmitat & Cholesterol
④	Number	• Multiple	• Single (Solitaire)	• Multiple	• Multiple
⑤	Size	• < 2.5cm	• > 2.5cm	• < 2.5cm	• < 2.5cm
⑥	Shape	• Faceted 	• Mamillated 	• Spicules 	• Laminated 
⑦	Colour	• Yellowish	• Yellowish	• Black	• Brown

N.B. : Type I Cholesterol Stones + Brown Stones = Mixed Stones

Radiological Methods

① Plain X-ray

② Oral Cholecystography

③ ERCP

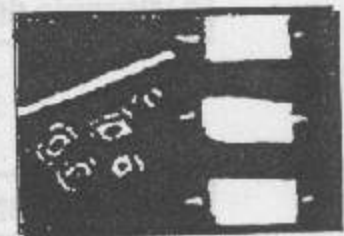
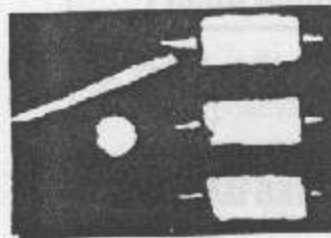
④ PTC

⑤ T-Tu

[1] Plain x-ray: (Rt. hypochondrial)

For Radio-opaque stones (only)

- If Single → G.B or Renal stone
- If Multiple → Mixed stones or Pigment stones.

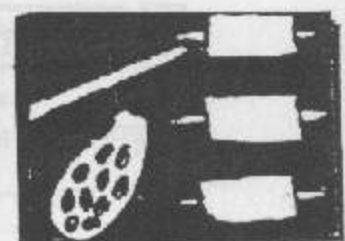
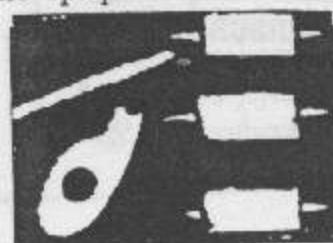


[2] Oral Cholecystography:

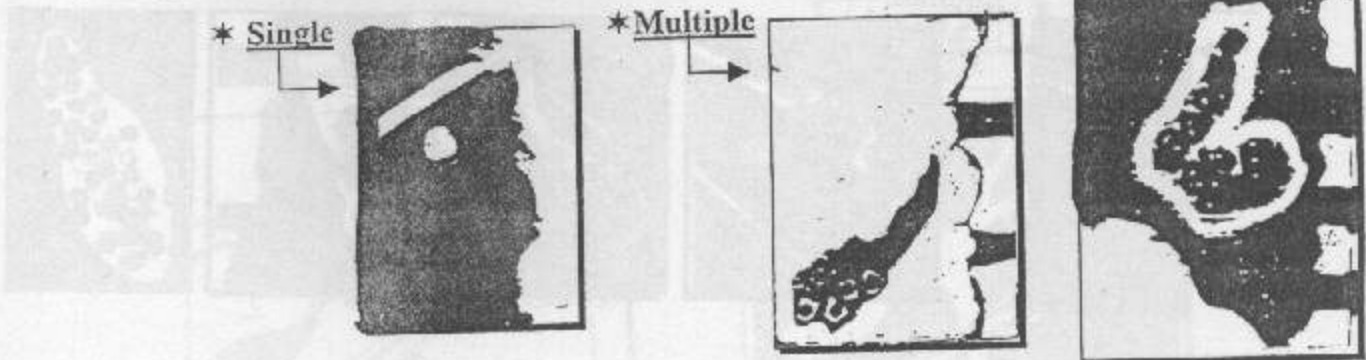
For Radiolucent stones (mainly) & Radio-opaque stones

- If Single → Cholesterol Stone II
- If Multiple → Mixed Stones or pigment stones.

N.B: the dye used is Telepaque
6 Tablets are given 12 hours before Examination.



1 Plain X-ray (Rt. Hypochondrium)



① This X-ray is:

- a. Plain x-ray Abdomen
- b. Barium Enema.
- c. An Excretory, Urography
- d. Oral Cholecystography.

② All are possible Aetiology, Except:

- a. Gall stones.
- b. Rt. Renal stone.
- c. Calcified Rt. renal T.B focus.
- d. Calcified Bilharzial infestation.
- e. Calcified L.Ns in Porta hepatis

③ The most Common age group:

- a. Newly born
- b. Children.
- c. Middle age.
- d. Old age.

④ Patient present with:

- a. Fatty dyspepsia.
- b. Fever.
- c. Jaundice.
- d. Colicky pain in Rt. hypochondrium.
- e. All of the above.

⑤ The patient presents with All, Except:

- a. Periodic dyspepsia.
- b. Jaundice.
- c. + ve Murphy's sign.
- d. Steatorrhea.

⑥ If Multiple stones:

Complications don't include:

- a. O.J.
- b. Intestinal obstruction.
- c. Acute Exacerbation.
- d. Malignancy.

⑦ If Single stone:

Complications include

- a. O.J.
- b. Intestinal obstruction.
- c. Acute Exacerbation.
- d. Malignancy.
- e. All of the above.

⑧ Investigations include All Except:

- a. Urine & Blood picture.
- b. Plain x-ray (lat. View).
- c. Oral Cholecystography.
- d. Abdominal U/S.
- e. C.T.scan.

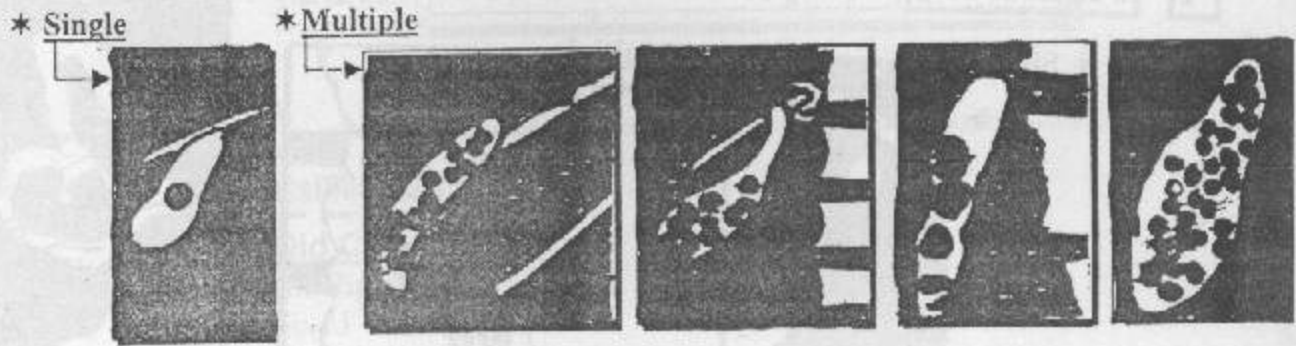
⑨ The Investigation of choice is:

- a. Urine & Blood picture.
- b. Plain x-ray (lat. View).
- c. Oral Cholecystography.
- d. Abdominal U/S.
- e. C. T. scan.

⑩ Main line of Treatment is:

- a. Conservative.
- b. Surgery.
- c. ESWL.
- d. All of the above.
- e. None of the above.

2 Oral Cholecystography



① This x-ray is:

- a. Plain x-ray.
- b. Oral Cholecystography.
- c. Barium Meal.
- d. Angiography.

② The dye used in this study is:

- a. Telepaque.
- b. Hypaque
- c. Lipidol.
- d. Barium.
- e. None of the above.

③ The dye is given:

- a. Immediately before x-ray.
- b. 1 hour before x-ray.
- c. 1 day before x-ray.
- d. 1 night before x-ray.

④ The following is observed, Except:

- a. Radio-opaque organ.
- b. Multiple filling defects.
- c. Filling defects are small.
- d. C. B. D. is dilated.
- e. The G. B. is visualized.

⑤ The patient present with:

- a. Fatty dyspepsia.
- b. Flatulence.
- c. Biliary colic.
- d. + ve Murphy's sign.
- e. All of the above.

⑥ Saint's Triad consists of:

- a. Gall stone.
- b. Diverticulosis coli.
- c. Hiatus Hernia.
- d. All of the above.
- e. None of the above.

⑦ Wilkie's Triade consists of:

- a. Chronic Cholecystitis.
- b. Chronic peptic ulcer.
- c. Chronic Appendicitis.
- d. All of the above.
- e. None of the above.

⑧ This Investigation can be done in the following, Except:

- a. Chronic Cholecystitis.
- b. Acute Cholecystitis.
- c. Biliary dyspepsia.
- d. Past History of Jaundice.

⑨ Serum bilirubin may be:

- a. <1mg%
- b. 3 mg%.
- c. >3mg%
- d. Any of the above
- e. None of the above.

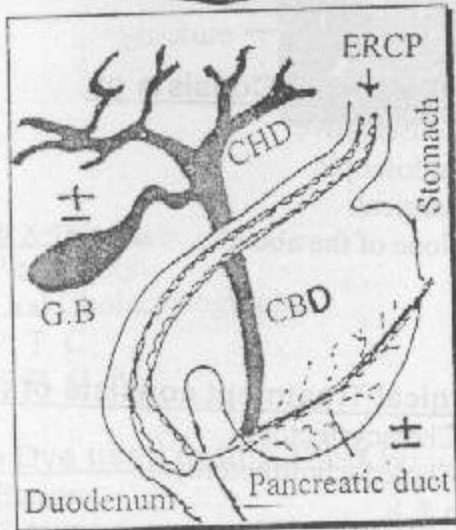
⑩ The Treatment Consists of:

- a. Conservative.
- b. ESWL.
- c. Cholecystectomy alone.
- d. Cholecystectomy
with CBD Exploration.

[The Biliary Tract]

3 ERCP Endoscopic Retrograde Cholangio Pancreatography

للفهم فقط



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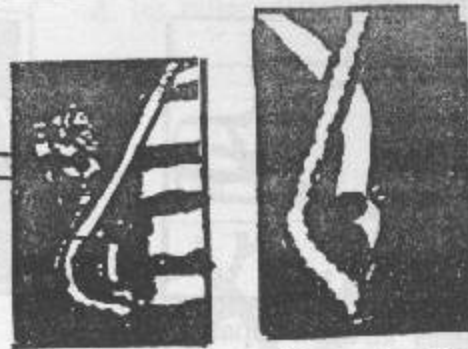


- **ERCP Visualizes** CBD + G.B + pancreatic duct.
- **ERCP Detects**
 - ① G.B stones
 - ② CBD stones
 - ③ Strictures of pancreatic duct.

As filling defect
- **ERCP is Complicated** (3%)
 - By ① Bleeding (Haemobilia) 2-9 %
 - ② Acute cholangitis. 1-3%.
 - ③ Acute pancreatitis 1-4 %.

ERCP Shows

Multiple stones in CBD



① **This x-ray is:**

- a. Barium Swallow
- b. Barium Meal.
- c. PTC.
- d. ERCP.

② **All are indications, Except:**

- a. Obstructive Jaundice.
- b. Chronic pancreatitis.
- c. Cancer pancreas.
- d. Cholangio-carcinoma.
- e. Hepato-cellular carcinoma.

③ **All are Complications of ERCP Except:**

- a. Cholangitis.
- b. Pancreatitis.
- c. Stricture of CBD.
- d. Haemobilia.

④ **This Lesion is 2ry to:**

- a. Gall bladder stone.
- b. Ascaris lubricoides.
- c. Stricture CBD.
- d. None of the above.

[The Biliary Tract]

22

⑤ The most common symptom is:

- a. Biliary pain.
- b. Fever.
- c. Pruritis.
- d. Jaundice.
- e. Dark urine.

⑥ The patient present will all, Except:

- a. Epigastric pain.
- b. Brown discoloured urine.
- c. Steatorrhoea.
- d. Enlarged tender liver.
- e. Periodic dyspepsia.

⑦ This Lesion is :

- a. Obstructive jaundice.
- b. Ascending cholangitis.
- c. Acute pancreatitis.
- d. None of the above.

⑧ ERCP used in all, Except,

- a. Caluclar O.J.
- b. Liver Metastasis.
- c. Chronic pancreatitis.
- d. Carcinoma of pancreatic head.

⑨ The Treatment Consists of:

- a. Conservative.
- b. Endoscopic.
- c. Surgical.
- d. None of the above.

⑩ Surgical Treatment consists of :

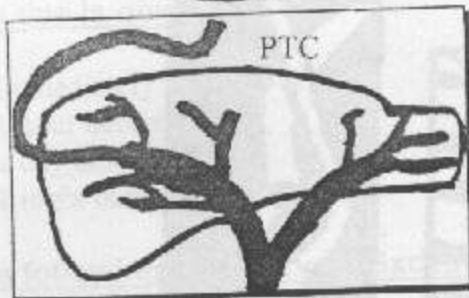
- a. Cholecystectomy
- b. Choledocholithotomy.
- c. a & b.
- d. None of the above.

4

PTC

Percutaneous Trans-hepatic Cholangiography

للفهم فقط



للامتحان



- PTC Visualizes all intra-hepatic biliary tree.
- PTC Detects obstruction high up in hepatic ducts

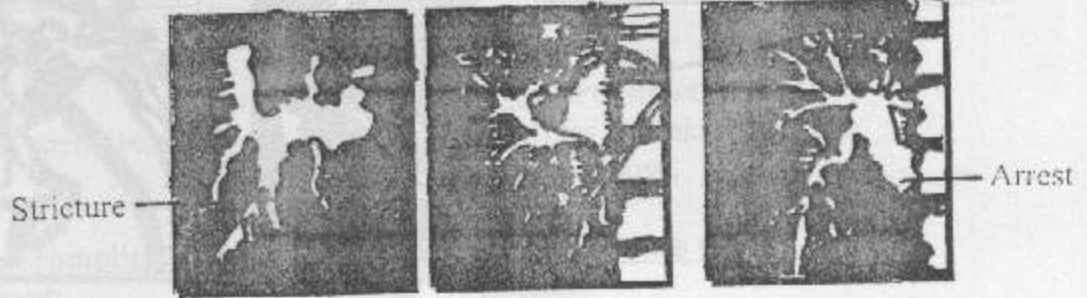


Sudden arrest of the dye
(usually at the level of CHD)
means ▪ Stricture.

- Malignancy.
- Stone.

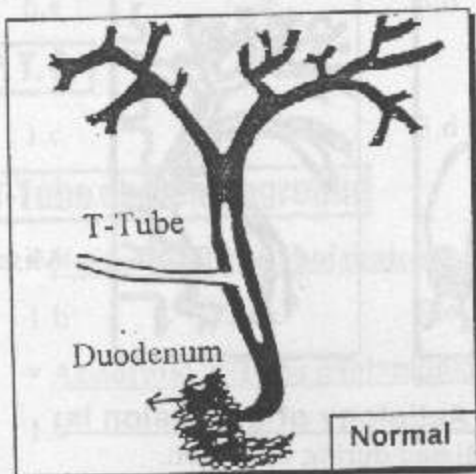
N.B: The dye used is Hepaque = Urografin

PTC

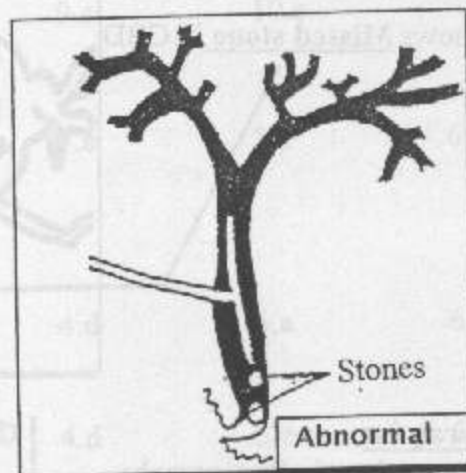


- ① This x-ray is:
 - a. Plain x-ray.
 - b. Oral Cholecystography.
 - c. P. T. C.
 - d. E. R. C. P.
- ② The Dye used in this study is:
 - a. Barium.
 - b. Telepaque.
 - c. Hypaque.
 - d. Lipidol.
 - e. None of the above.
- ③ The followings are observed:
 - a. Dilated Rt. & Lt. hepatic duct.
 - b. Filling defect in CHD.
 - c. No dye in distal part of CBD.
 - d. All of the above.
- ④ The patient present with all Except:
 - a. jaundice.
 - b. Constipation.
 - c. Cholangitis.
 - d. Enlarged Tender Liver.
- ⑤ In this patient serum Alkaline Phosphatase is:
 - a. 0-3 king Armstrong unit.
 - b. 3-5 king Armstrong unit.
 - c. 30-40 king Armstrong unit.
 - d. None.
- ⑥ The principle line of treatment is:
 - a. Surgery for stricture.
 - b. P. T. D.
 - c. Cholecystotomy.
 - d. Int. biliary fistula.

5 T-Tube cholangiography



- No filling defects in CBD
- CBD Not dilated.
- The dye reach the duodenum.



- Filling defect in CBD i.e stones
- CBD dilated.
- The dye didn't reach the duodenum

[A] Normal T-Tube Cholangiography:



- | | |
|--|---|
| <p>① <u>This x-ray is:</u></p> <ol style="list-style-type: none"> Per-operative cholangiography. T-tube cholangiography. I. V. cholangiography P. T. C. <p>② <u>The following signs are observed Except:</u></p> <ol style="list-style-type: none"> Normal bile duct. No filling defect. No leakage of dye. Distended gall bladder. <p>③ <u>The G.B is not seen because:</u></p> <ol style="list-style-type: none"> None functioning. Obstructed. Surgically removed. None of the above. | <p>④ <u>X-ray is done:</u></p> <ol style="list-style-type: none"> Per-operative. 1 day after operation. 5-7 days after operation. 10-14 days after operation. <p>⑤ <u>In this patient removal of a Tube should be done:</u></p> <ol style="list-style-type: none"> immediately now. After 2 weeks. After 1 month. After dealing with obstruction. <p>⑥ <u>Removal of the Tube now, results in:</u></p> <ol style="list-style-type: none"> Cure. Biliary peritonitis. Biliary fistula. Recurrence. |
|--|---|

[B] Abnormal T-Tub Cholangiography:

Shows Missed stone in CBD



Missed stone

- | | |
|---|--|
| <p>① <u>This X-ray is:</u></p> <ol style="list-style-type: none"> Per-operative cholangiography. T-tube cholangiography. I. V cholangiography. P. T. C. | <p>② <u>The Aetiology of this lesion is:</u></p> <ol style="list-style-type: none"> Missed during operation. Recurrent. Either a or b. All of the above. |
|---|--|

[The Biliary Tract]

③ This X-ray study is done:

- Pre-operative.
- Immediately post-operative.
- Intra-operative.
- 10 days post-operative.

④ All are possible complications of this condition, Except:

- Cholangitis.
- Biliary fistula.
- Obstructive jaundice.
- Acute cholecystitis.

⑤ Treatment of this condition is:

- Removal of tube.
- Medical treatment.
- Removal of obstructing stone.
- Tube left for 3 weeks.
- None of the above.

⑥ Treatment consists of:

- Dissalution.
- Basket Extraction.
- ERCP & Sphincterotomy.
- Surgery.
- All of the above.

Answers



1 Plain X-ray

- | | | | | |
|-----|-----|-----|-----|------|
| 1.a | 2.d | 3.c | 4.e | 5.a |
| 6.b | 7.e | 8.e | 9.d | 10.b |

2 Oral cholecystography

- | | | | | |
|-----|-----|-----|-----|------|
| 1.b | 2.a | 3.d | 4.d | 5.e |
| 6.d | 7.d | 8.b | 9.d | 10.d |

3 E.R.C.P

- | | | | | |
|-----|-----|-----|-----|------|
| 1.d | 2.e | 3.c | 4.c | 5.d |
| 6.e | 7.a | 8.b | 9.c | 10.c |

4 P.T.C.

- | | | | | | |
|-----|-----|-----|-----|-----|-----|
| 1.c | 2.c | 3.d | 4.b | 5.c | 6.a |
|-----|-----|-----|-----|-----|-----|

5 T-Tube cholangiography

▪ Normal T-Tube cholangiography.

- | | | | | | |
|-----|-----|-----|-----|-----|-----|
| 1.b | 2.d | 3.c | 4.d | 5.a | 6.a |
|-----|-----|-----|-----|-----|-----|

▪ Abnormal T-Tube cholangiography.

- | | | | | | |
|-----|-----|-----|-----|-----|-----|
| 1.b | 2.a | 3.d | 4.d | 5.c | 6.e |
|-----|-----|-----|-----|-----|-----|

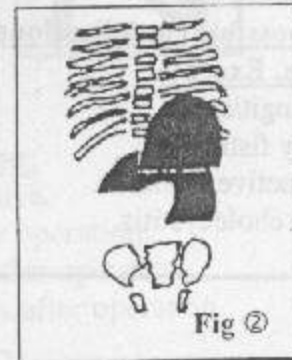
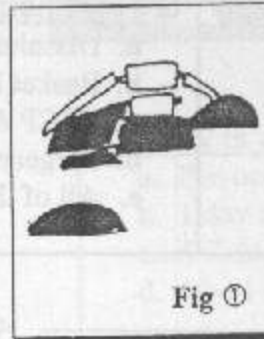
IV Small & Large Intestine

I - Plain X-ray

[I] Plain x-ray

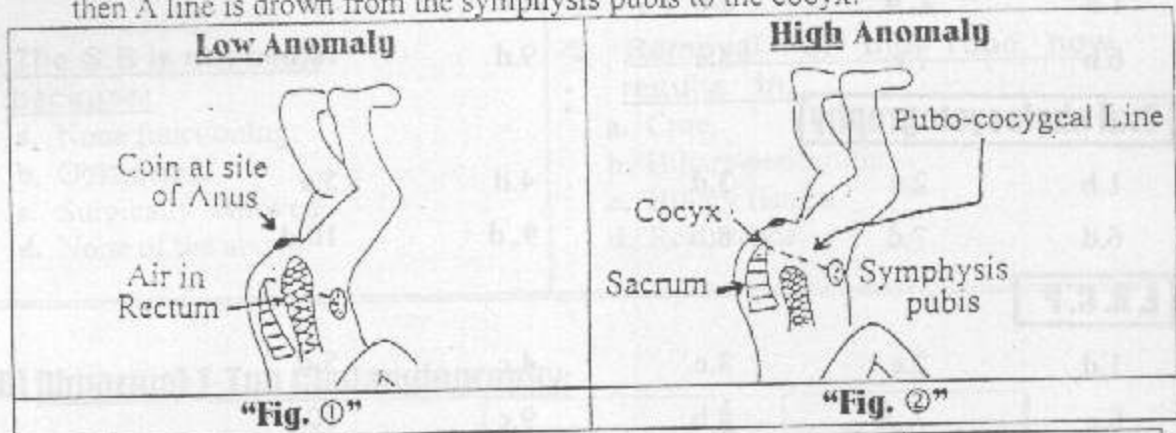
Erect position shows
Multiple fluid level
= Intestinal obstruction
See Fig ① & ②

II- Invertogram



[II] Invertogram: = Imperforated Anus

- 24 hours after with the infant held upside down with a radio-opaque marker on the Anus
then A line is drawn from the symphysis pubis to the coccyx.

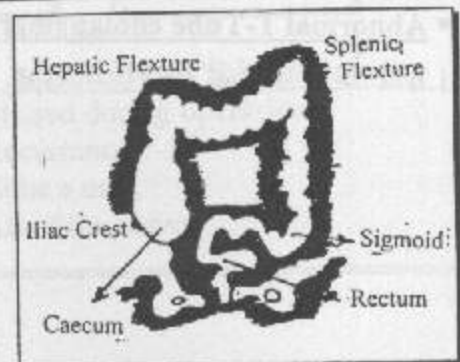


- IF the gas shadow in the Rectum is seen above the pubo-coccygeal line the anomaly is Low- see (Fig. ①).
- But IF below the line the anomaly is High see (Fig. ②).

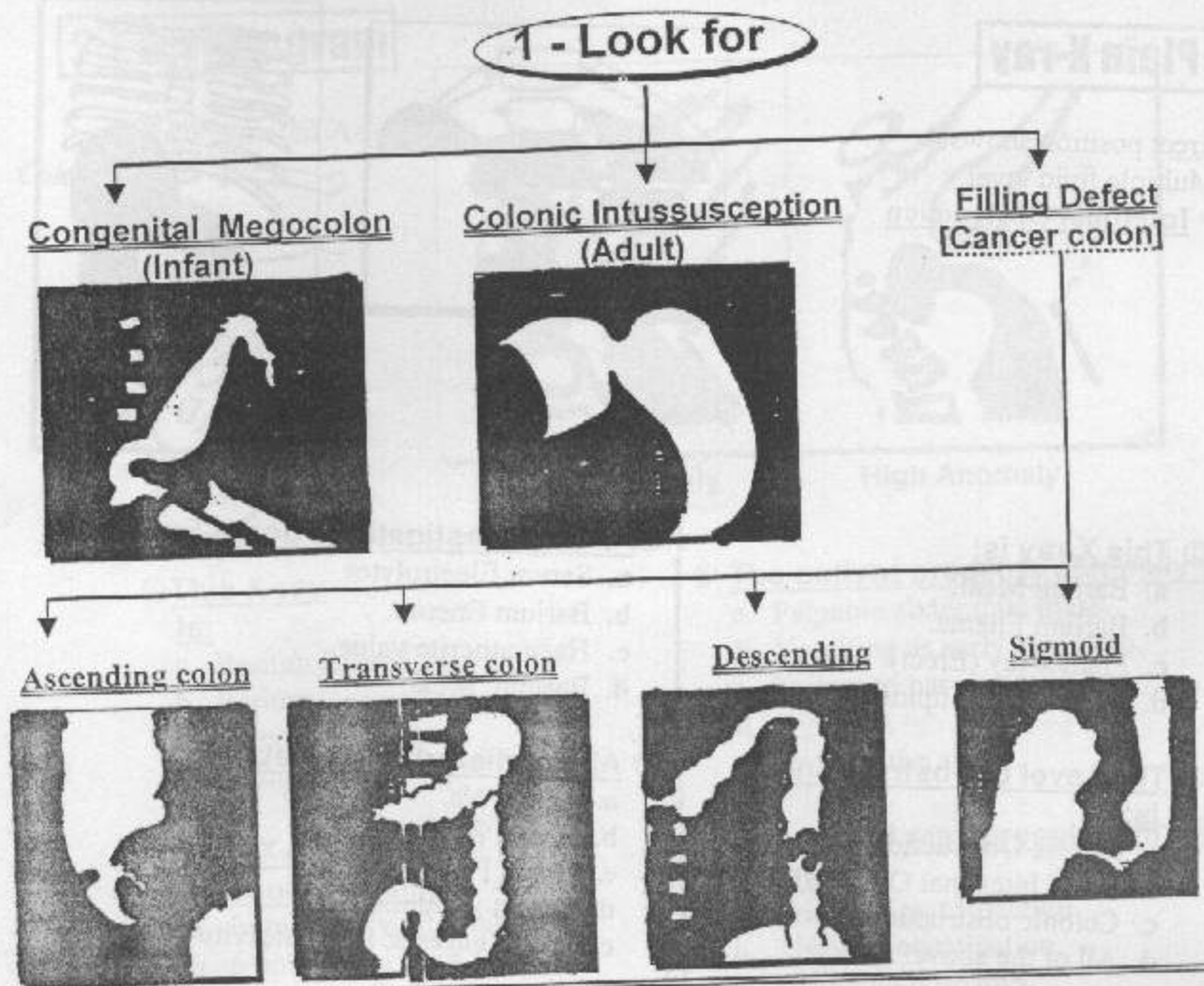


[III] Barium Enema:

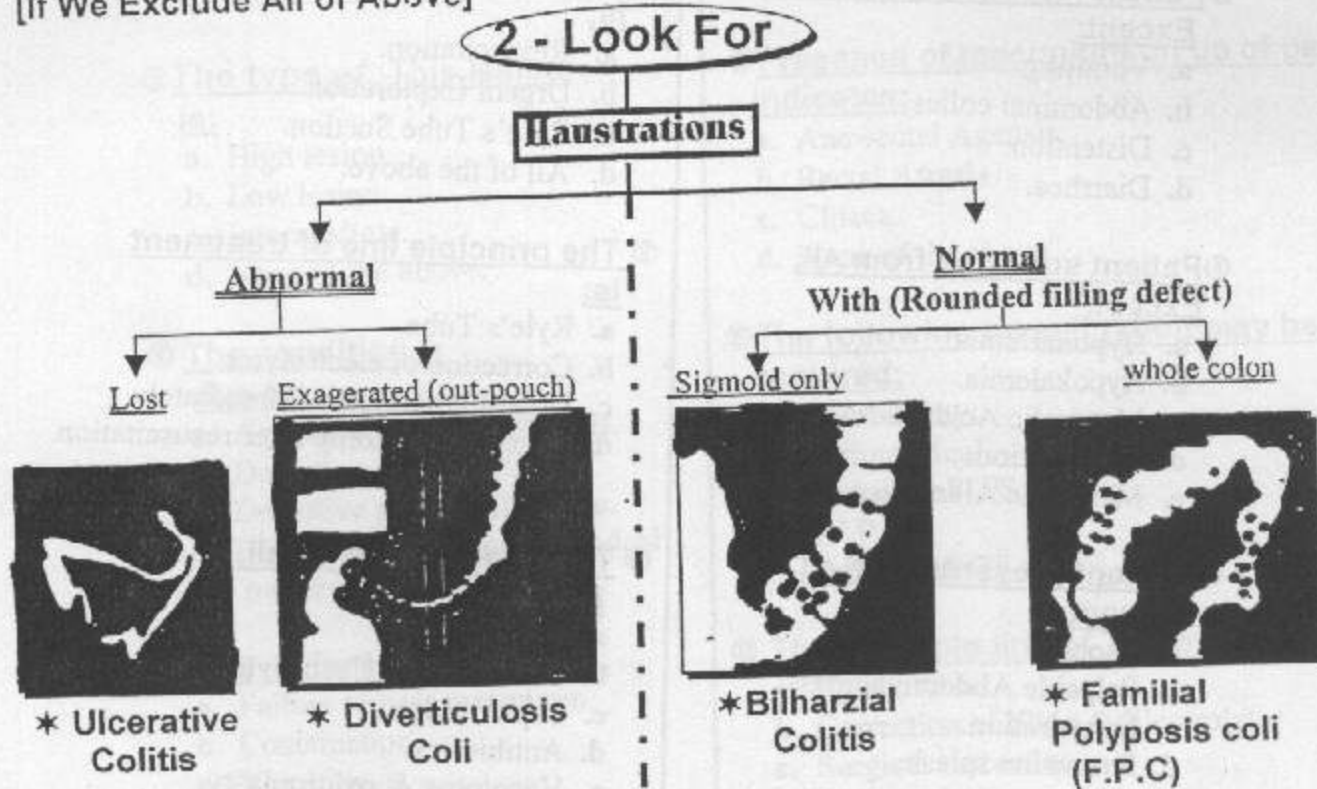
Normal Appearance
Shows All parts of colon
With ① The Haustrations are obvious.
② Hepatic Flexure is Lower
Than splenic Flexature.
③ Caecum lies in Rt. Iliac fossa.



[Small & Large Intestine]



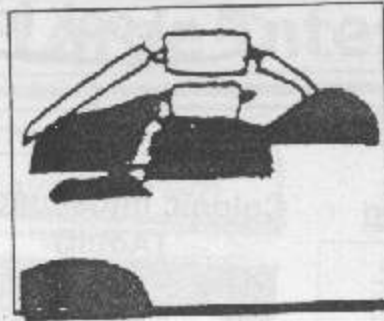
[If We Exclude All of Above]



[Small & Large Intestine]

1 Plain X-ray

Erect position shows
Multiple fluid level
= Intestinal Obstruction



① This X-ray is:

- a. Barium Meal.
- b. Barium Enema.
- c. Plain x-ray (Erect).
- d. Plain x-ray (Supine).

② The Level of obstruction is:

- a. Pyloric Obstruction.
- b. Small Intestinal Obstruction.
- c. Colonic obstruction.
- d. All of the above.

③ Patient represents with any, Except:

- a. Vomiting.
- b. Abdominal colics.
- c. Distention.
- d. Diarrhea.

④ Patient suffering from All, Except.

- a. Hyponatremia.
- b. Hypokalemia.
- c. Metabolic Acidosis.
- d. Dehydration.
- e. Metabolic Alkalosis.

⑤ Patient presents with all, Except.

- a. Shock.
- b. Palpable Abdominal mass.
- c. Dehydration.
- d. Succussion splash.

⑥ All are Investigations done, Except:

- a. Serum Electrolytes.
- b. Barium Enema.
- c. Haematocrite value.
- d. Barium, Meal.

⑦ All are disturbed, Except:

- a. Serum Na.
- b. Serum K.
- c. Blood P.H.
- d. Serum Albumin.
- e. Blood gases & Haematocrite value.

⑧ The principle Line of treatment is:

- a. Resuscitation.
- b. Urgent Exploration.
- c. Ryle's Tube Suction.
- d. All of the above.

⑨ The principle line of treatment is:

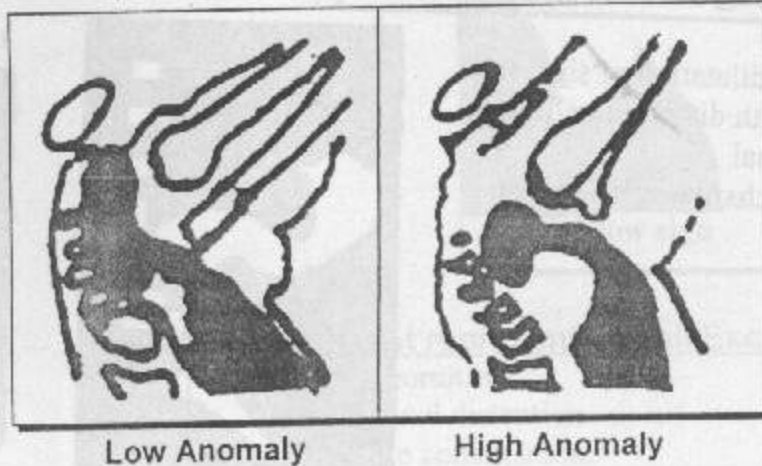
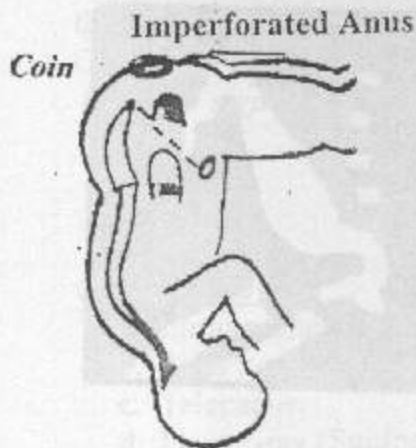
- a. Ryle's Tube.
- b. Correction of electrolytes.
- c. Urgent laparotomy immediately
- d. Urgent laparotomy after resuscitation.

⑩ Treatment Could be all, Except:

- a. Ryle's tube.
- b. Correction of electrolytes.
- c. Laparotomy.
- d. Antibiotics.
- e. Vagotomy & pyloroplasty.

[Small & Large Intestine]

2 Invertogram



① This X-ray is:

- a. Barium Enema.
- b. Barium.
- c. Invertogram.
- d. Plain X-ray.

② This X-ray is usually done:

- a. Immediately after birth.
- b. 6 hours after birth.
- c. 24 hours after birth.
- d. 1 week after birth.

③ The type of This lesion is:

- a. High lesion.
- b. Low lesion.
- c. Intermediate.
- d. None of the above.

④ The condition is due to:

- a. Agensis of rectum & Anus.
- b. Defective sympathetic.
- c. Defective para-sympathetic.
- d. Defective rupture of proctodeal membrane.

⑤ The patient presents with:

- a. Failure to pass meconium.
- b. Constipation.
- c. Vomiting.
- d. Bleeding per-rectum.

⑥ The patient presents clinically with:

- a. Palpable abdominal mass.
- b. Vomiting as early symptom.
- c. Failure to pass meconium.
- d. Dyspnea.
- e. None of the above.

⑦ The patient may present with all Except:

- a. Urinary Tract Infection.
- b. Absolute constipation.
- c. Fistula with urethra.
- d. Marked loss of weight.

⑧ Presence of meconium on tip of penis indicates:

- a. Ano-rectal Agensis.
- b. Rectal Atresia.
- c. Cloaca.
- d. None of the above.

⑨ The following investigation may be required:

- a. Chest-X-ray.
- b. Barium Meal.
- c. Abdominal U/S.
- d. I.V.P.
- e. Abdominal CT scan.

⑩ The principle line of Treatment is:

- a. Ryle's tube.
- b. Correction of Fluid & Electrolyte.
- c. Surgical correction.
- d. Colostomy.
- e. None of the above.

3 Congenital Megacolon (Infant)

Marked dilatation of sigmoid colon with distal funnelling of Anal canal
i.e Hirschsprung's Disease



① This x-ray is:

- a. Barium Meal.
- b. Plain X-ray.
- c. Barium Enema.
- d. None of the above.

② The following is observed Except:

- a. X-ray infant (lat. View).
- b. Narrow anal canal & Rectum.
- c. Dilatation start from Recto-sigmoid.
- d. Multiple fluid level.

③ The Lesion is:

- a. Congenital.
- b. Traumatic.
- c. Inflammatory.
- d. Neoplastic.
- e. Others

④ This Lesion is 2 ry to:

- a. Familial Polyposis Coli.
- b. Bilharzial Polyposis.
- c. Defect in sympathetic fibers.
- d. Defect in para-sympathetic fibers.
- e. Defect in protodeal membrane.

⑤ The patient presents with:

- a. Constipation.
- b. Failure to pass meconium.
- c. Vomiting.
- d. Bleeding per-rectum.
- e. All of the above.

⑥ patient presents with all, Except:

- a. Marked abdominal distension
- b. Dyspnea.
- c. Palpable abdominal mass.
- d. Neonatal diarrhoea.

⑦ Dignosis does not depend on:

- a. Biopsy of rectum.
- b. Typical Barium Enema.
- c. History of chronic constipation.
- d. Ano-rectal manometry.
- e. Exploration.

⑧ The most imp. Investigation is:

- a. History of chronic constipation.
- b. Barium Enema.
- c. P/ R Examination.
- d. Abdominal distension.
- e. Rectal biopsy.

⑨ The principle line of treatment is:

- a. Laxative.
- b. Proximal Colostomy.
- c. Dilatation.
- d. All of the above.
- e. None of the above.

⑩ The Treatment is by:

- a. Direct cruciate incision.
- b. Temporary pelvic Colostomy.
- c. Abdomino-perineal resection with Terminal Colostomy.
- d. Localized resection of colon with reconstruction of continuity.

4 Colonic Intussusception

Sudden Arrest of Barium at the level of the Transverse Colon in a Crescentic manner i.e Claw sign



① This x-ray is:

- a. Barium Enema.
- b. Plain x-ray (Erect).
- c. Telepaque.
- d. Plain x-ray (Supine).

② The Radiological sign is:

- a. Irregular filling defect.
- b. Claw sign
- c. Colonic stricture.
- d. None of the above.

③ The Most accepted diagnosis:

- a. Cancer Transverse colon.
- b. Volvulus.
- c. Intussuception.
- d. Gall stone Ileus.

④ The patient represents by all, Except:

- a. Faecal vomiting.
- b. Abdominal distention.
- c. Absolute constipation.
- d. Mass at Rt. Iliac fossa.

⑤ All are possible complication, Except:

- a. Peritonitis.
- b. Septicaemia.
- c. Hypokalaemia.
- d. Hyponatraemia.
- e. Hypoalbuminaemia.

⑥ The principle line of treatment:

- a. Ryle's Tube.
- b. Fluid & Electrolytes correction.
- c. Surgical correction.
- d. Rectal Tube decompression.

5 Cancer Ascending & Transverse colon

* Cancer Ascending Colon



*Cancer Transverse Colon



① This x-ray is :

- a. Barium Follow-through.
- b. Barium Meal.
- c. Barium Enema.
- d. None of the above.

② The Cause of this lesion is not:

- a. Dietary.
- b. Familial polyposis coli.
- c. Ulcerative colitis.
- d. Bilharzial colitis.
- e. Adenomatous polyp.

[Small & Large Intestine]

③ The patient presents with:

- a. Diarrhea.
- b. Constipation.
- c. Either a or b.
- d. Melena.

④ The patient presents with All. Except:

- a. Marked Anaemia.
- b. Jaundice.
- c. Chronic constipation.
- d. Chronic diarrhoea.

⑤ The patient presents with all. Except:

- a. Enlarged liver.
- b. Spurious diarrhoea.
- c. Bleeding per-rectum.
- d. Abdominal distention.

⑥ All are Essential Investigations. Except:

- a. Stool Analysis.
- b. Liver function tests.
- c. Sigmoidoscopy & biopsy.
- d. C. E. A.

⑦ Treatment Could be:

- a. Pelvic colostomy.
- b. Lt. Hemi-colectomy.
- c. A-P resection.
- d. All of the above.
- e. None of the above.

⑧ Treatment, doeo not include:

- a. Rt. Hemi-colectomy.
- b. Pelvic colostomy.
- c. Ileo-transverse Anastomosis
- d. Transverie colostomy with end to end anastomosis .

6

Cancer descending & sigmoid colon



① patient presents with:

- a. Chronic progressive constipation.
- b. Dysentery.
- c. Vomiting.
- d. Diarrhoea.

② patient presents clinically with all Except:

- a. chronic constipation.
- b. Spurious diarrhoea.
- c. Palpable tumor mass.
- d. Mass at root of neck.

③ All are possible complications Except:

- a. peritonitis.
- b. Ascites.
- c. Intestinal obstruction.
- d. Dehydration.

④ Investigations include:

- a. Stool analysis.
- b. Endoscopic biopsy.
- c. Abdominal U/S.
- d. All of the above.

[Small & Large Intestine]

⑤ The diagnostic investigation is:

- a. C Tsan.
- b. Colonoscopy & biopsy.
- c. Stool analysis.
- d. Carcino-Embryonic Antigen.

⑥ The principle line of tt with inoperable cases is:

- a. Lt. Hemi-colectomy.
- b. Transverse colostomy.
- c. Radiotherapy.
- d. Rectal tube decompression.

7 Ulcerative Colitis

loss of Haustrations
with marrow contracted colon
i.e Pipe-stem appearance.



① This x-ray is:

- a. Barium Meal
- b. Barium Enema.
- c. Barium Follow through.
- d. Plain X-ray.

② The following is observed:

- a. narrow contracted colon.
- b. Pipe stem colon.
- c. Ribbon shaped colon.
- d. All of the above.

③ The lesion may be related to:

- a. Auto-immune.
- b. Allergic.
- c. Genetic.
- d. Environmental.
- e. All of the above.

④ The patient presents clinically with:

- a. Severe Colics.
- b. Diarrhoea.
- c. Bleeding per-rectum.
- d. All of the above.

⑤ Patient liable for the following complications, Except:

- a. Toxic megacolon.
- b. Severe bleeding.
- c. Malignancy.
- d. Fistula formation.

⑥ It is associated with:

- a. Arthritis.
- b. Skin lesion.
- c. Sclerosing Cholangitis.
- d. Liver cirrhosis.
- e. All of the above.

⑦ The principle line of treatment is:

- a. Anti-diarrhoeal drugs.
- b. Intestinal Antiseptics.
- c. Salazopyrine.
- d. Total Procto-colectomy.

⑧ The treatment with Advanced (chronic) Cases:

- a. I. V steroids.
- b. Immuno & Chemotherapy.
- c. Total Procto-colectomy.
- d. None of the above.



Crhons' Disease

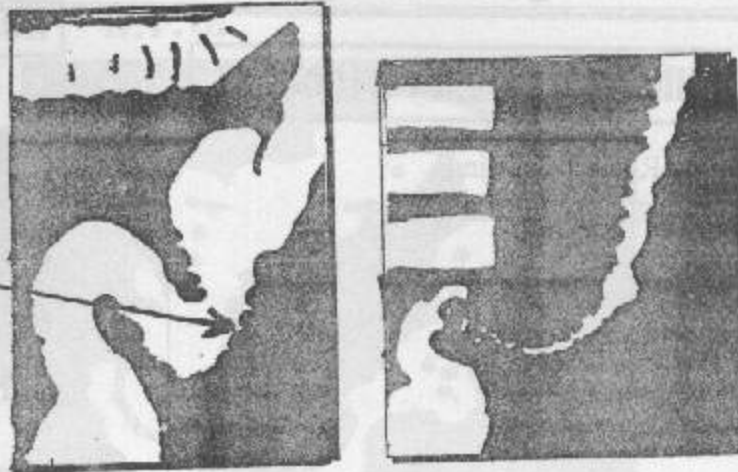


- ① This X-ray is
 - a. Barium Meal.
 - b. Barium Enema.
 - c. Barium follow through.
 - d. X-ray (plain).
- ② The following is observed :
 - a. Narrowing contracted colon.
 - b. Ripe stem colon.
 - c. Ribbon shaped colon.
 - d. Narrowing of ileum.
- ③ This Lesion may be related to :
 - a. Auto-immune.
 - b. Allergic.
 - c. Genetic.
 - d. Environmental.
 - e. All of the above.
- ④ The patient presents clinically with except :
 - a. Severe colics.
 - b. Diarrhae.
 - c. Bleeding per rectum.
 - d. All of the above.
- ⑤ The lesion is :
 - a. Non specific ulceration.
 - b. Non specific granuloma.
 - c. a or b
 - d. None of the above.
- ⑥ Patient liable for the following complications :
 - a. Malabsorption.
 - b. Perianal abscess.
 - c. Fistula formation.
 - d. All of the above.
- ⑦ It is associated with
 - a. Arthritis.
 - b. Skin lesion.
 - c. Sclerosing cholangitis.
 - d. Liver cirrhosis.
 - e. All of the above.
- ⑧ Investigation of choice :
 - a. Barium meal follow through.
 - b. Proctoscopy.
 - c. Blood picture.
 - d. All of the above.
- ⑨ The principle line of treatment is :
 - a. Anti-diarrhaeal drugs.
 - b. Intestinal antiseptics.
 - c. Salasopyrine.
 - d. Total procto-colectomy.
- ⑩ The treatment with advanced (chronic) cases :
 - a. I.V steroids.
 - b. Immuno & chemotherapy.
 - c. Localized resection of affected loop.
 - d. None of the above.

[Small & Large Intestine]

8 Diverticulosis coli

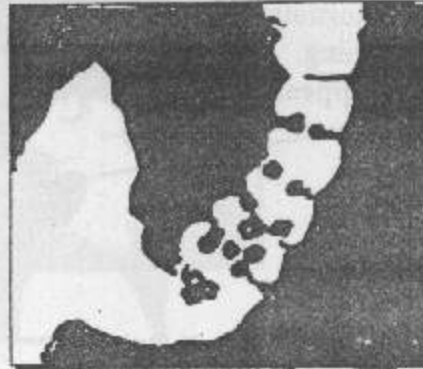
Exaggerated Haustrations
With out-pouching.
i.e. Saw teeth appearance



- ① This X-ray is:
 - a. Barium Enema.
 - b. Barium Meal.
 - c. Invertogram.
 - d. Plain x-ray.
- ② The following is observed:
 - a. Sawteeth appearance.
 - b. Out-pouch of contrast.
 - c. Out-pouch with narrow neck.
 - d. Narrow lumen.
 - e. All of the above.
- ③ The Aetiology of this lesion is:
 - a. Congenital.
 - b. Traumatic.
 - c. Neoplastic.
 - d. None of the above.
- ④ The commonest predisposing factor is:
 - a. Diarrhoea.
 - b. Malignant stricture.
 - c. Constipation.
 - d. Para-sympathetic defect.
 - e. None of the above.
- ⑤ The lesion affect all, Except:
 - a. Sigmoid.
 - b. Ascending colon.
 - c. Descending colon.
 - d. Rectum.
 - e. Transverse colon.
- ⑥ Patient presents with:
 - a. Constipation.
 - b. Diarrhoea.
 - c. Melena.
 - d. All of the above.
- ⑦ patient presents with all, Except:
 - a. constipation.
 - b. Anal fissure.
 - c. Mass in Lt iliac fossa.
 - d. Intestinal obstruction.
- ⑧ The Following is associated :
 - a. Gall stones.
 - b. Hiatus Hernia.
 - c. Constipation.
 - d. All of the above.
 - e. None of the above.
- ⑨ Complications don't include:
 - a. Infection.
 - b. Bleeding.
 - c. Fistula.
 - d. Obstruction.
 - e. Malignancy.
- ⑩ The principle line of Treatment is :
 - a. Anti-spasmodics.
 - b. Correct constipation.
 - c. Sigmoid colectomy.
 - d. Antibiotics.
 - e. None.

9 Bilharzial polyposis (colitis)

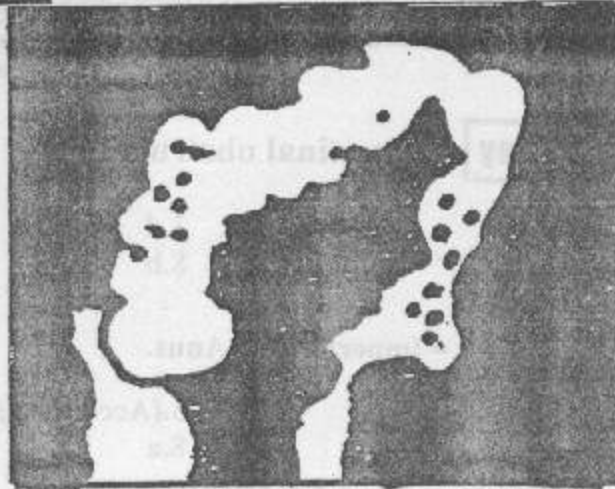
Multiple Rounded Filling defects at sigmoid only



- ① This x-ray is:
 - a. Barium Enema.
 - b. Barium meal.
 - c. Plain x-ray.
 - d. Invertogram.
- ② The patient presents with:
 - a. Anaemia.
 - b. Tenesmus.
 - c. Dyspepsia.
 - d. All of the above.
 - e. None of the above.
- ③ Complications include.
 - a. Haemorrhage.
 - b. Anaemia.
 - c. Rectal prolapse.
 - d. All of the above.
 - e. None of the above.
- ④ Complications don't include.
 - a. carcinoma.
 - b. Acute intestinal obstruction.
 - c. a & b.
 - d. Anaemia.
 - e. Rectal prolapse.
- ⑤ Abdominal Examination does not reveal:
 - a. mass in Lt iliac fossa.
 - b. Abdominal distension.
 - c. Mass in Rt. iliac fossa.
 - d. Rectal mass.
- ⑥ Investigations do not include:
 - a. Barium swallow.
 - b. Endoscopy.
 - c. Spleno portography.
 - d. P. T. C.
 - e. None of the above.
- ⑦ The most reliable investigation is:
 - a. Barium Enema.
 - b. P/R Examination.
 - c. Stool Analysis.
 - d. Colonoscopy & biopsy.
- ⑧ The principle line of treatment is:
 - a. Anti-bilharzial drugs.
 - b. Sigmoidoscopic removal of polyps.
 - c. Sigmoid colectomy.
 - d. None of the above.
- ⑨ Treatment includes:
 - a. Praziquantal.
 - b. Iron preparation.
 - c. Aldactone.
 - d. All of the above.
 - e. None of the above.
- ⑩ persistent bleeding not esponding to medical treatment is managed by:
 - a. Anti-bilharzial drugs.
 - b. Blood transfusion.
 - c. Sigmoidoscopic removal of polyps.
 - d. Sigmoid colectomy

10 Familial Polyposis Coli (F. P. C)

Multiple Rounded Filling defects at Whole colon



- ① This X-ray is:
 - a. Barium Enema.
 - b. Barium meal.
 - c. Barium swallow.
 - d. Plain x-ray.
- ② The following will observed:
 - a. Barium Enema.
 - b. Multiple filling defects.
 - c. A & b.
 - d. Affect the sigmoid only.
 - e. All of the above.
- ③ The Aetiology of this lesion is:
 - a. Neoplastic.
 - b. Inflammatory.
 - c. Hormonal.
 - d. Congenital.
 - e. None of the above.
- ④ Patients present with all Except:
 - a. Diarrhoea.
 - b. Dysentery.
 - c. Bleeding per-rectum.
 - d. Lower abdominal pain.
 - e. Intestinal obstruction.
- ⑤ Patients present with all, Except:
 - a. chronic diarrhoea.
 - b. Bleeding per-rectum.
 - c. Mass of skull & mandible.
 - d. Peritonitis.
- ⑥ Lesion may be associated with:
 - a. Osteoma of skull & mandible.
 - b. Multiple sebaceous cyst.
 - c. Desmoid Tumor.
 - d. All of the above.
- ⑦ The serious complication is:
 - a. Stricture formation.
 - b. Malignant Transformation.
 - c. Severe bleeding.
 - d. None of the above.
- ⑧ The incidence of malignant transformation is:
 - a. 0%.
 - b. 100%.
 - c. 10-20%.
 - d. 30-40%.
- ⑨ Investigations include:
 - a. Stool analysis.
 - b. Endoscopy & Biopsy.
 - c. Barium Enema.
 - d. All of the above.
 - e. None of the above.
- ⑩ The principle line of treatment is:
 - a. Total procto-colectomy.
 - b. Sigmoidoscopic removal of polyps.
 - c. Immunotherapy & Chemotherapy.
 - d. Anti-diarrhoeal drugs.

Answers



1 Plain X-ray = Intestinal obstruction

1.c 2.b 3.d 4.e 5.d
6.d 7.d 8.b 9.d 10.e

2 Invertogram = Imperforated Anus.

1.c 2.c 3.(According) 4.a 5.a
6.c 7.d 8.a 9.d 10.c

3 Congenital Megacolon = Hirschsprung's diseases

1.c 2.d 3.a 4.d 5.a
6.d 7.e 8.c 9.e 10.d

4 Colonic Intussusception

1.a 2.b 3.c 4.d 5.e 6.c

5 Cancer Ascending & Transverse colon

1.c 2.d 3.a 4.c 5.b
6.c 7.e 8.b

6 Cancer Descending & Sigmoid colon

1.a 2.c 3.d 4.d 5.b 6.b

7 Ulcerative colitis

1.b 2.d 3.e 4.d 5.d
6.e 7.c 8.c

N.B. : Chron's disease

8 Diverticulosis Coli

1.c 2.d 3.e 4.c 5.b
6.d 7.e 8.a 9.c 10.c

1.a 2.e 3.d 4.c 5.d
6.a 7.b 8.d 9.e 10.b

9 Bilharzial polyposis (Colitis)

1.a 2.d 3.d 4.c 5.e
6.d 7.d 8.a 9.d 10.c

10 Familial polyposis Coli

1.a 2.c 3.d 4.e 5.d
6.d 7.b 8.b 9.d 10.a

Urinary Tract Radiology

The Urinary Tract

(A) Plain x-ray

(B) I. V. P.

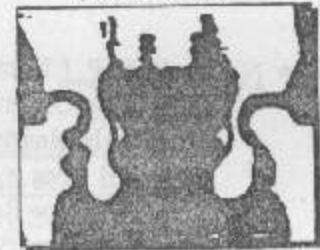
A Plain x-ray

Urinary
Stones

Bilharzial
Calcification
Of (U.B)



Ectopia
Vesica
(Extrophy)



	Oxalate	Phosphate	Uric acid	Cystine
• Incidence	70 %	15 %	7-9 %	V. rare
• Chemistry :	Ca oxalate	Ca phosphate or combine with Ammonium phosphate & Magnesium phosphate i.e Triple phosphate	Uric acid + ca oxalate	Non-essential amino acid
• Number :	Single	Single or multiple	Multiple	Multiple
• Size :	Moderate	Large ♦ It may fill the renal pelvis & the calyces taking their shape i.e stage horn stone 	Small	Small
• Surface & Shape	• Irregular & <u>spiky</u> 	• Smooth	Smooth & may be Faceted	• Smooth
• Consistency:	Very hard	Chalky , friable	Hard	Soft
• X-ray :	Radio-opaque	Opaque	Pure uric acid stones are radiolucent	Opaque

[The Urinary Tract]

So We will Study



Renal Stone



Ureteric Stones



Urinary bladder Stone



Stone urethra

* Normal I.V.P. [Intra-venous pyelography]

▪ The dye: Urogralene (Hypaque)

▪ Contraindicated with

- ① Urea > 100 mg % i.e uraemia.
- ② Poor Renal function i.e Anuria.
- ③ Urinary Tract Infection i.e Pyelonephritis.

* It detect the followings:

[1] Pelvi-calyceal system



① Double Ureter



② Nephroptosis



③ Ectopic kidney



④ Horse shoe kidney



⑤ Hydroureter & Hydronephrosis



⑥ Hypernephroma

[2] Bladder pathology



Cancer bladder



S.E.P



Cancer prostate

[3] Urethra

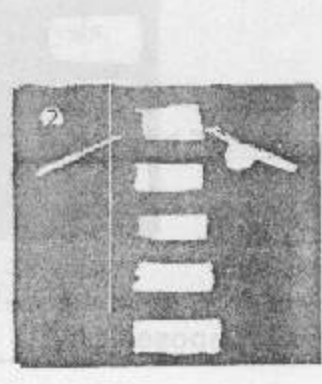


Urethral Diverticulum

[The Urinary Tract]

1 Stone kidney

Radio-opaque shadow
In Rt. Lt., or both
hypochondrium.



① This x-ray is:

- a. Plain x-ray chest.
- b. Plain x-ray Abdomen.
- c. Plain x-ray Abdomen & pelvis.
- d. I.V.P.

② This Lesion could be, Except:

- a. Phosphate.
- b. Oxalate
- c. Uric acid
- d. Cystine

③ At X-ray (N^o3) only

Rt. side Lesion is characterized by:

- a. Hard & Fragile
- b. Stony Hard.
- c. Soft
- d. None of the above.

④ The patient presents with all Except:

- a. Renal colics.
- b. Back pain.
- c. Dysuria.
- d. Terminal Haematuria.

⑤ At x-ray (No1) only

The possible Aetiology are Except:

- a. gall stone.
- b. Rt. Renal stone.
- c. Calcified L.Ns in porta hepatis.
- d. Calcified Rt. renal T.B focus.
- e. Calcified Bilharzial Infestation.

⑥ The patient is liable for all

These complications are Except.

- a. Obstruction of urinary tract.
- b. Haematuria .
- c. Malignancy of renal pelvis.
- d. Frequency of micturation.

⑦ Investigations include:

- a. I.V.P
- b. Abdominal U/S.
- c. Plain x-ray (lat. View).
- d. All of the above.

⑧ At x-ray (N^o2) only

Investigations include all Except:

- a. I.V.P
- b. Abdominal U/S.
- c. Plain x-ray (lat. View).
- d. All of the above.

⑨ The Best method of prevention is:

- a. Diet.
- b. Fluids.
- c. Medications.
- d. Weight reduction

⑩ The most suitable surgical

approach:

- a. Pyelolithotomy.
- b. Nephrolithotomy.
- c. Pylonephrolithotomy.
- d. Nephrectomy.

N.B Staghorn stone kidney: **Ix-ray**

Not need (lat. View)



① The Lesion is composed of:

- a. Oxalate.
- b. Triple phosphate.
- c. Uric acid.
- d. Cystine.

② The main Aetiology is:

- a. obstruction.
- b. Infection.
- c. Metabolic errors.
- d. Hypercalcaemia.

③ The lesion is characterized by:

- a. soft.
- b. Hard & Fragile
- c. Stone hard.
- d. Radioluscent.

④ Urine Analysis not show:

- a. Alkaline PH
- b. Acidic PH.
- c. Phosphate crystals.
- d. Pus cells.

⑤ Treatment is best done by:

- a. medical.
- b. Surgical.
- c. Endoscopic.
- d. ESWL.

⑥ Treatment does not include:

- a. Pyelolithotomy.
- b. Nephrolithotomy.
- c. Nephrectomy.
- d. Litholapaxy.

2 **Stone ureter** **Ix-ray**

usually opposite

- ① Transverse lumbar vertebrae
- ② Sacroiliac Joint.
- ③ Ischeal spine.



① This x-ray is:

- a. Plain x-ray Chest.
- b. Plain x-ray Abdomen.
- c. Plain x-ray Pelvis.
- d. I.V.P.

② The patient presents mainly by:

- a. Colicky pain.
- b. Loin swelling.
- c. Dysuria.
- d. Haematuria.

[The Urinary Tract]

③ Patient presents with all, Except:

- a. Colicky pain.
- b. Haematuria.
- c. Anuria.
- d. Retention of urine.

④ All are possible complications, Except:

- a. Hydroureter & Hydronephrosis.
- b. Pyuria.
- c. Anuria.
- d. Interrupted micturation.

⑤ Essential Investigations are:

- a. Kidney Function Tests.
- b. I.V.P.
- c. Urine Analysis.
- d. All of the above.

⑥ The accepted line of Treatment:

- a. Pyelolithotomy.
- b. Nephrolithotomy.
- c. Cystolithotomy.
- d. Uretrolithotomy.

3 Stone Urinary Bladder [x-ray]



① The Lesion is composed of:

- a. Cholesterol.
- b. Pigment.
- c. Uric acid.
- d. Ca oxalate.
- e. Mixed.

② The lesion is:

- a. The Commonest type.
- b. The Rarest type.
- c. A rare type.
- d. Extremely rare.

③ The patient presents with all, Except:

- a. Dysuria.
- b. Hesitency.
- c. Painful terminal Haematuria.
- d. Diurnal frequency.

④ The patient presents with all, Except:

- a. Colicky abdominal pain.
- b. Retention of urine.
- c. Burning micturation.
- d. Pyuria.

⑤ Investigations don't include:

- a. Urine Analysis.
- b. I.V.P
- c. Plain x-ray (lat. view).
- d. Serum creatinine.
- e. Blood urea.

⑥ The principle line of treatment:

- a. Pyelolithotomy.
- b. Cytolithotomy.
- c. Diuretics.
- d. Urine Antiseptics.
- e. None of the above.

4 Calcified urinary Bladder [x-ray]



① This x-ray is:

- a. Plain x-ray chest.
- b. Plain x-ray Abdomen.
- c. Plain x-ray pelvis.
- d. I.V.P.

② The Condition is due to:

- a. Chronic Bilharzial cystitis.
- b. T.B cystitis.
- c. Non specific cystitis.
- d. Stone.

③ The incidence of the lesion:

- a. Common in Egypt.
- b. Common at 10-30 years.
- c. Common with male.
- d. All of the above.

④ The patient presents with all, Except:

- a. Frequency.
- b. Dysuria.
- c. Terminal Haematuria.
- d. None of the above.

⑤ The patient may presents with all, Except:

- a. Supra-pubic pain.
- b. Supra-pubic fullness.
- c. Dysuria.
- d. Renal colic.
- e. All of the above.

⑥ The most serious complication is:

- a. Stone formation.
- b. Malignancy.
- c. Infection.
- d. None of the above.

⑦ All are essential investigations, Except:

- a. Cystoscopy.
- b. I.V.P.
- c. Urine Analysis.
- d. Pelvic sonar.

⑧ Investigations do not include:

- a. Cystoscopy
- b. Cystography.
- c. Barium Enema.
- d. Liver Function Tests.
- e. Aortography.

⑨ Treatment is by:

- a. Urinary Antiseptics.
- b. Antibilharzial drugs.
- c. Total cystectomy.
- d. Cystoscopic curettage & litholapexy.
- e. Urinary diversion.

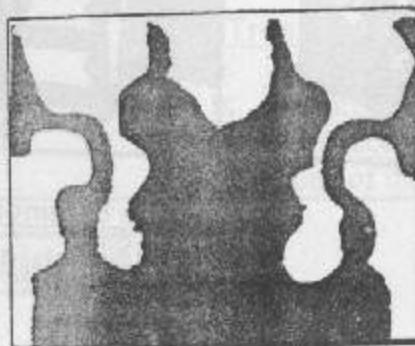
⑩ IF associated stricture lower 1/3 of ureter. The Treatment is:

- a. Trans-ureteral Meatotomy.
- b. Excision with end to end anastomoses.
- c. Cysto-ureteroplasty (Boaris)
- d. All of the above.

[The Urinary Tract]

5 Ectopia Vesica (x-ray)

Deficient symphysis
Pubis & both pubic
rami



① This x-ray is:

- a. I.V.P
- b. Plain x-ray.
- c. Barium Enema.
- d. None of the above.

② This x-ray shows:

- a. Widening of symphysis pubis.
- b. Stone bladder.
- c. Calcified bladder.
- d. None of the above.

③ This lesion is Commonly:

- a. Congenital.
- b. Traumatic.
- c. Inflammatory.
- d. Neoplastic.

④ The Incidence of this lesion:

- a. 1: 50.000 liver birth.
- b. 4 male: 1 Female.
- c. All of the above.
- d. None of the above.

⑤ The patient presents with all, Except:

- a. Skin Maceration.
- b. Epispadias.
- c. Waddling gait.
- d. Absent Ant. Wall of bladder.
- e. Bladder diverticulum.

⑥ The lesion may be associated with:

- a. Indirect Inguinal Hernia.
- b. Epispadias with male.
- c. Cleft Clitoris with female.
- d. All of the above.

⑦ All are complications. Except:

- a. Cancer bladder.
- b. Renal Infection.
- c. Stone formation.
- d. Excoriation of skin.

⑧ The cause of death:

- a. Acute Renal Failure.
- b. Cancer bladder.
- c. Excoriation of skin.
- d. All of the above.
- e. None of the above.

⑨ The principle line of Treatment is:

- a. Plastic Reconstruction.
- b. Cystectomy & urinary diversion.
- c. Urine Antiseptics & A.B.
- d. All of the above.
- e. None of the above.

⑩ The complications of urinary diversion are:

- a. Metabolic abnormalities.
- b. Recurrent renal infection.
- c. Predispose to cancer.
- d. All of the above.

1 Double Pelvis & Double ureter

[I.V.P]



① This x-ray is:

- a. I.V.P.
- b. Ascending cystography.
- c. Descending cystography.
- d. Myodil Myelography.

② The commonest predisposing factor is:

- a. Congenital.
- b. Traumatic.
- c. Inflammatory.
- d. Neoplastic.

③ There is evidence of:

- a. dilated pelvi-calycal system.
- b. Double ureter & double pelvis.
- c. Irregular filling defect in bladder.
- d. None of the above.

④ The commonest presentstion is:

- a. Silent.
- b. Polyuria.
- c. Pyuria.
- d. Dysuria.

⑤ Blood urea suspected to be:

- a. 20-40 mg %.
- b. < 100 mg %.
- c. 100 mg %.
- d. Any of above.

⑥ The Ideal Treatment is:

- a. No Treatment.
- b. Nephrectomy.
- c. Cystectomy.
- d. Radiotharapy.

2 Ectopic kidney

[I.V.P]

Ptosed kidney with
Short ureter



① This x-ray is:

- a. I.V.P.
- b. Ascending cystography.
- c. Descending cystography.
- d. Plain X-ray.
- e. None of the above.

② The Aetiology is:

- a. Congenital.
- b. Acquired.
- c. Inflammatory.
- d. Neoplastic.
- e. Traumatic.

[The Urinary Tract]

47

③ **Patient presents with:**

- a. Asymptomatic.
- b. Tender mass in iliac fossa.
- c. a or b.
- d. None of the above.

④ **I.V.P may show:**

- a. Short ureter.
- b. Long colid ureter.
- c. All of the above.
- d. None of the above.

⑤ **Aortography shows renal artery aries from:**

- a. lower part of Aorta.
- b. Common iliac artery.
- c. All of the above.
- d. None of the above.

⑥ **Treatment of choice is:**

- a. No treatment.
- b. Nephropexy.
- c. Nephrectomy.
- d. None of the above.

3 Nephroptosis (Mobile kidney) I.I.V.P

Ptosed kidney with
long coiled ureter



① **This x-ray is:**

- a. I.V.P
- b. Ascending cystography
- c. Descending cystography
- d. Plain X-ray.
- e. None of the above.

② **The Aetiology is:**

- a. Congenital.
- b. Acquired.
- c. Inflammatory.
- d. Neoplastic.

③ **The Possible Aetiology:**

- a. Part of general visceroptosis.
- b. Rapid loss of weight.
- c. Trauma to loin.
- d. All f the above.

④ **Patient presents with:**

- a. Renal Colic.
- b. Tender mass in iliac fosa or loin.
- c. All of the above.
- d. None of the above.

⑤ **The essential investigation is:**

- a. I.V.P
- b. Abdominal sonar.
- c. Renal Angiography.
- d. CT Scan abdomen.

⑥ **The Treatment of choice is:**

- a. No treatment.
- b. Nephropexy.
- c. Nephrectomy.
- d. None of the above.

4 Horse shoe kidney [I.V.P]

- Both kidney at lower level
- Ureters converge then diverge.



① This x-ray is:

- I.V.P
- Plain x-ray.
- Aortography.
- Cystography.

② The Followings may be observed:

- Both kidneys at lower level.
- Ureters converge then diverge.
- Calyces directed medially.
- All of the above.

③ The Lesion is due to:

- Anomaly of Ascend.
- Anomaly of fusion.
- Anomaly of Rotation.
- All of the above.

④ The patient presents with:

- Asymptomatic.
- Stone, infection & Haematuria.
- Tender mass below umbilicus.
- All of the above.

⑤ Complications do not include:

- Hydronephrosis.
- Infection.
- Stone.
- Malignancy.

⑥ Treatment is:

- Conservative & Follow up.
- Isthmusectomy.
- Renal Transplantation.
- None of the above.

5 Hydroureter & Hydronephrosis [I.V.P]

- Dilated ballooned pelvicalyceal system $\pm$ dilated ureter.



① This x-ray is:

- I.V.P
- Plain x-ray.
- Aortography.
- Cystography.

② Patient presents with all, Except:

- Renal Ballotment.
- Abdominal swelling.
- Polyuria.
- Terminal Haematuria.

[The Urinary Tract]

③ Patient doesn't present early with:

- a. Polyuria.
- b. Loin pain.
- c. Renal mass.
- d. None of the above.

④ All are complications, Except:

- a. Infection.
- b. Rupture.
- c. Stone formation.
- d. Malignant Transformation.

⑤ The blood urea level is:

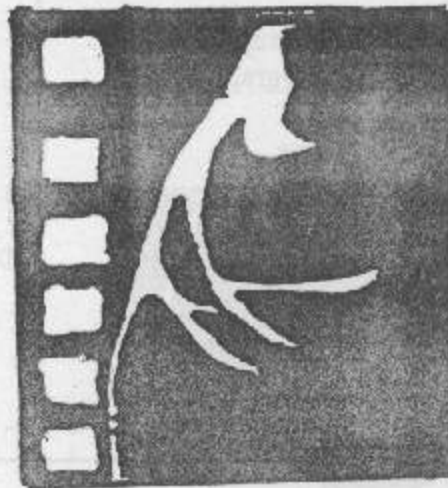
- a. 20-40 mg %
- b. 100-130 mg %.
- c. 150-200 mg%.
- d. 200 mg %.

⑥ The principle line of Treatment:

- a. Nephrectomy.
- b. Nephrostomy.
- c. Renal Transplantation.
- d. Deal with distal obstruction.

6 Hypernephroma (I.V.P)

- Big soft tissue shadow at upper pole.
- Widening, Compression or Amputation of middle & lower calyces



① This x-ray is:

- a. I.V.P
- b. Ascending pyelography.
- c. Descending pyelography.
- d. Plain x-ray.
- e. None.

② The commonest site of origin is:

- a. Upper pole kidney.
- b. Lower pole kidney.
- c. Renal pelvis.
- d. Peri-nephric tissue.

③ The Repersenting Feature is:

- a. Renal mass.
- b. Total painless Heamaturia.
- c. Renal Hypertension.
- d. Renal failure.

④ All are complications, Except:

- a. Loss of weight.
- b. Varicocele.
- c. Hypertension.
- d. Renal failure.

⑤ The dianostic investigation is:

- a. I.V.P
- b. CT scan.
- c. Urine cytology.
- d. Chest x-ray.

⑥ The principle line of treatment:

- a. Chemotherapy.
- b. Radical Nephrectomy.
- c. Total nephro-uretrectomy.
- d. Nephrostomy.

[The Urinary Tract]

N.B

Polycystic kidney I.V.P

Wide calyces separated by cyst in between.



① **This X-ray is :**

- a. I.V.P.
- b. Ascending pyelography.
- c. Descending pyelography.
- d. Plain x-ray.
- e. None of the above.

② **The underlying pathology is :**

- a. Congenital.
- b. Traumatic.
- c. Inflammatory.
- d. Neoplasm.

③ **Representing feature is :**

- a. Uremia if bilateral.
- b. Pain (Haveness).
- c. Haematuria.
- d. All of the above.

④ **Principle line of treatment is :**

- a. Conservative.
- b. Rovsing's operation.
- c. a + b.
- d. None of the above.

7

Urethral stricture

- Ascending Urothrogrophy shows stricture of the urethra.



① **This study is:**

- a. I.V.P
- b. Ascending urethrography.
- c. Cystography.
- d. Post-micturation film.

④ **All are Complications, Except**

- a. Peri-urethral fistula.
- b. Infertility.
- c. Prostatitis.
- d. Malignancy.

[The Urinary Tract]

② The Aetiology may be:

- a. Congenital.
- b. Traumatic.
- c. Inflammatory.
- d. All of the above.

③ Patient presents with all, Except:

- a. Retention of urine.
- b. Haematuria.
- c. Pyuria.
- d. Hesitency.

⑤ All are essential Investigation Except:

- a. Urethral sound.
- b. Urethrography.
- c. Trans-rectal sonar.
- d. Descending cystography.

⑥ The Principle lie of Treatment is:

- a. Catheterization.
- b. Dilatation.
- c. Surgical Reconstruction.
- d. Supra-pubic cystostomy.

8 Cancer Bladder I.V.P

Either Lateral. Wall or
Apical filling defect



① This x-ray:

- a. I.V.P
- b. X-ray.
- c. Aortography.
- d. Urethrography.

② The lesion is mainly 2 ry to:

- a. Chronic Bilharzial cystitis.
- b. Stone bladder.
- c. Aniline dyes.
- d. Villous papilloma.

③ Patient presents with all, Except:

- a. Dysuria.
- b. Sciatica.
- c. Terminal Haematuria.
- d. Mass by P/R Examination.

⑦ The commonest cause of death is:

- a. Cachexia.
- b. Metastasis.
- c. Uraemia.
- d. Haematuria.

⑧ The Diagnostic Investigation:

- a. P/R Examination.
- b. Urine Cytology.
- c. Staining of tumor in situ.
- d. Cystoscopic Biopsy & Tissue Histology

⑨ In Early Cases:

The principle line of Treatment is:

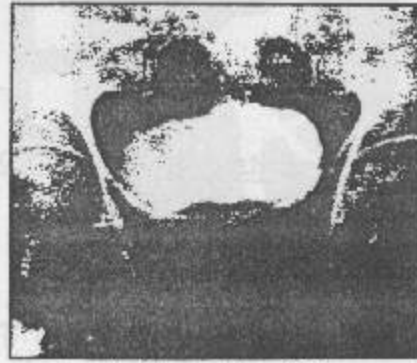
- a. Partial cystectomy.
- b. Total Radical cystectomy.
- c. Chemotherapy.
- d. Radiotherapy.

9 Snile Enlargement prostate (S.E.P) II.V.PI

- Smooth Basal filling defect.



Median defect = Median lobe enlargement



Butterfly defect = 2 lateral lobes enlargement

① This x-ray shows:

- a. Plain x-ray.
- b. Irregular filling defect.
- c. Smooth basal filling defect.
- d. All of the above.

② This lesion affects male over:

- a. 20 years.
- b. 30 years.
- c. 50 years.
- d. None of the above.

③ The Incidence of this lesion is:

- a. 50 % >50 years.
- b. 30 %.
- c. 100 %.
- d. 0 %.

④ The commonest predisposing factor is:

- a. Traumatic.
- b. Hormonal.
- c. Inflammatory.
- d. Neoplastic.

⑤ The following is not Affected:

- a. Median lobe.
- b. Lt. lateral lobe.
- c. Rt. lateral lobe.
- d. Posterior lobe.
- e. None of the above.

⑥ Patient presents with:

- a. Hesitancy.
- b. Frequency Per night.
- c. Post-micturation dribbling.
- d. All of the above.

⑦ The distressing symptom is:

- a. Frequency.
- b. Hesitancy.
- c. Dripping.
- d. Impotence.

⑧ All are complications, Except:

- a. Swelling at the groin.
- b. Cystitis.
- c. Diverticulum.
- d. Malignancy.
- e. None of the above.

⑨ All are Investigations, Except:

- a. Urine Analysis.
- b. Cystoscopy.
- c. Trans-rectal U/S.
- d. Alkaline phosphatase enzyme.
- e. None of the above.

⑩ The principle line of Treatment is:

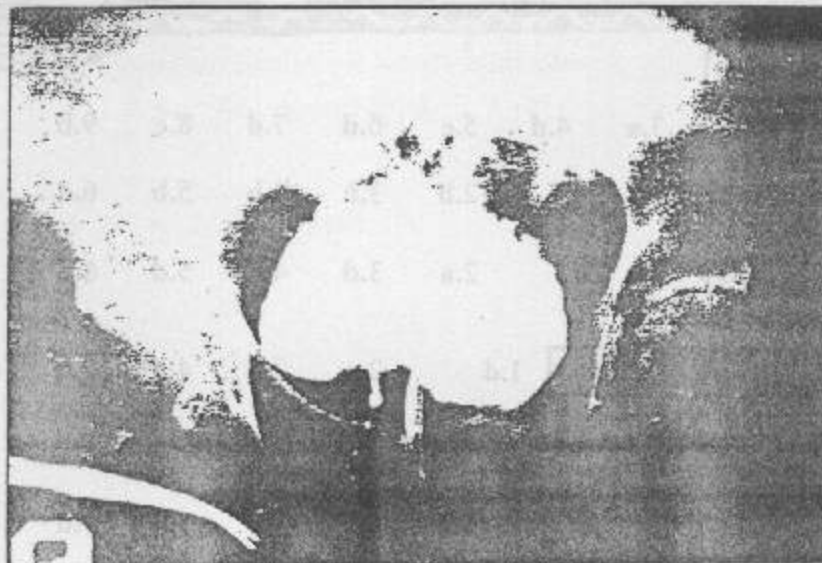
- a. Conservative Treatment.
- b. Prostatectomy.
- c. Testosterone injection.
- d. Bilateral orchidectomy.

N.B: Prostatectomy if complicated

[The Urinary Tract]

10 Cancer prostate

- Irregular Basal filling defect



① This x-ray is:

- a. I.V.P
- b. Irregular Basal filling defect.
- c. Smooth. Apical surface.
- d. All of the above.

② The Incidence of this lesion is:

- a. Young male.
- b. Old male.
- c. V. old male.
- d. None of the above.

③ The commonest predisposing factor is:

- a. S.E.P
- b. Hormonal Imbalance.
- c. Benign Tumors.
- d. None of the above.

④ The following is affected:

- a. Median lobe.
- b. Posterior lobe.
- c. Rt. lateral lobe.
- d. Lt. lateral lobe.

⑤ The M/E is:

- a. Adenocarcinoma.
- b. Squamous cell carcinoma.
- c. Transitional cell carcinoma.
- d. None of the above.

⑥ Patient presents with all, Except:

- a. Urine retention.
- b. Back pains.
- c. Pathological fracture.
- d. Renal colic.

⑦ Usually, 1st symptom is:

- a. Metastasis.
- b. Accidentally.
- c. Urine Retention.
- d. None of the above.

⑧ All are Essential Investigations Except:

- a. Serum Acid phosphatase Enzyme.
- b. Prostatic Specific Antigen.
- c. Trans-rectal U/S & Biopsy.
- d. Bone scan.
- e. Abdominal U/S.

⑨ The diagnostic Investigation is:

- a. Serum Acid phosphatase Enzyme.
- b. Prostatic Specific Antigen.
- c. Trans-rectal U/S & Biopsy.
- d. Bone scan.

⑩ The principle line of Treatment is:

- a. Hormonal treatment.
- b. Radical prostatectomy.
- c. Chemotherapy.
- d. Radiotherapy.
- e. Orchidectomy.

Answers



1 Stone kidney

1.c 2.c 3.a 4.d 5.e 6.d 7.d 8.c 9.b 10.a

N.B staghorn stone

1.b 2.b 3.b 4.b 5.b 6.d

2 Stone Ureter

1.c 2.a 3.d 4.d 5.d 6.d

3 Stone urinary Bladder

1.d 2.a 3.b 4.a 5.c 6.b

4 Calcified urinary Bladder

1.c 2.a 3.d 4.c 5.d 6.b 7.d 8.e 9.d 10.d

5 Ectopia vesica [Extrophy]

1.b 2.a 3.a 4.c 5.e 6.d 7.c 8.a 9.b 10.d

1 Double pelvis & Double ureter

1.a 2.a 3.b 4.a 5.a 6.a

2 Ectopic kidney

1.a 2.a 3.c 4.a 5.c 6.a

3 Nephroptosis

1.a 2.b 3.d 4.c 5.c 6.b

4 Horse shoe kidney

1.a 2.d 3.d 4.d 5.d 6.a

5 Hydroureter & Hydronephrosis

1.a 2.d 3.c 4.d 5.a 6.d

6 Hypernephroma

1.a 2.a 3.b 4.d 5.b 6.b

N.B. : Polycystic kidney: 1. a 2.a 3. d 4. c

7 urethral stricture

1.b 2.d 3.d 4.d 5.c 6.b

8 Cancer Bladder

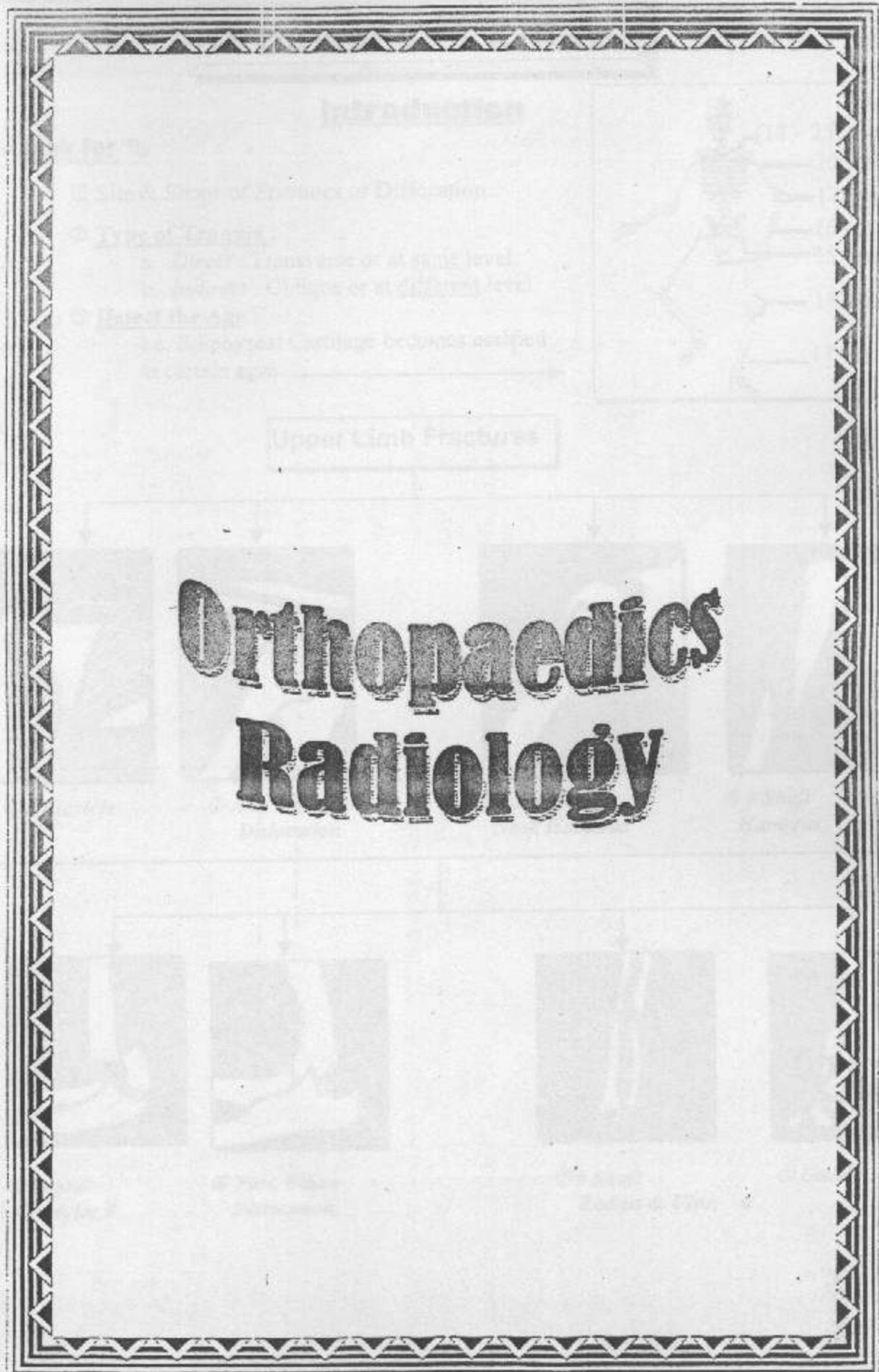
1.a 2.a 3.b 4.c 5. d 6.b

9 Senile Enlargement prostate (S.E.P)

1.c 2.c 3.a 4.b 5.d 6.d 7.a 8.d 9.d 10.a

10 Cancer prostate

1.b 2.c 3.b 4.b 5.a 6.d 7.a 8.e 9.c 10.a

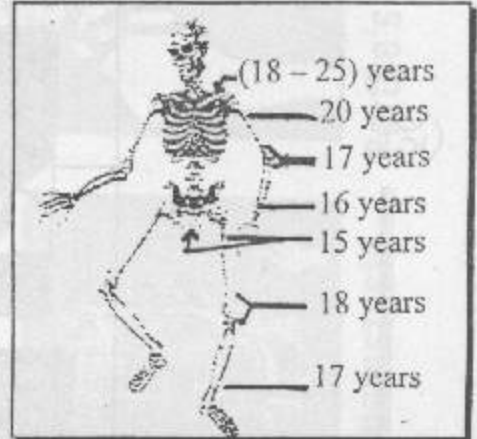


Orthopaedics X-Rays

Introduction

★ Look For

- ① Site & Shape of Fractures or Dislocation.
- ② Type of Trauma :
 - a. *Direct* : Transverse or at same level.
 - b. *Indirect* : Oblique or at different level.
- ③ Detect the Age :
i.e. Epiphyseal Cartilage becomes ossified at certain ages



Upper Limb Fractures



① # Clavicle



② Ant. Shoulder Dislocation



③ # Surgical Neck Humerus



④ # Shaft Humerus



⑤ Supra-Condylar #



⑥ Post. Elbow Dislocation

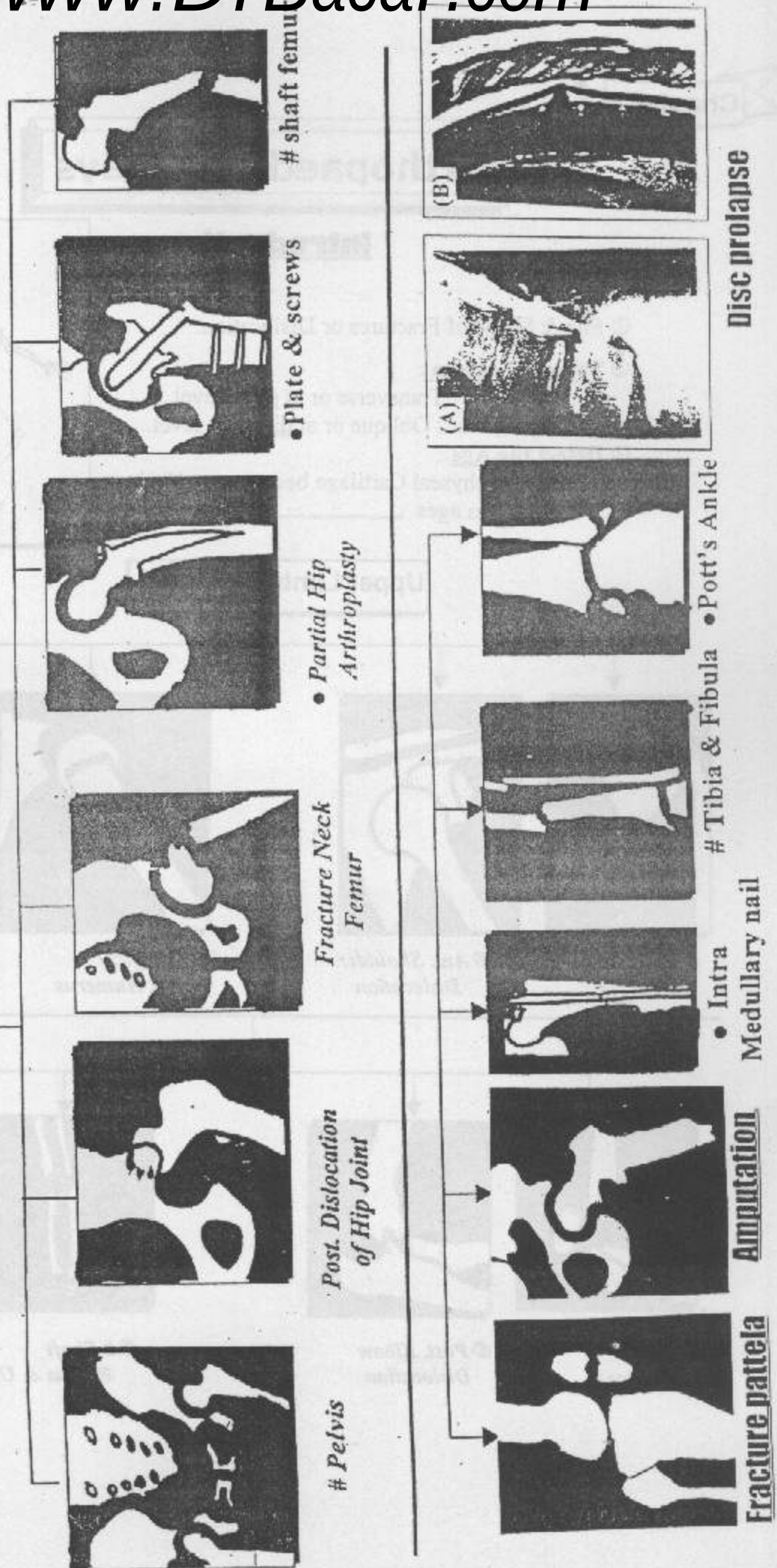


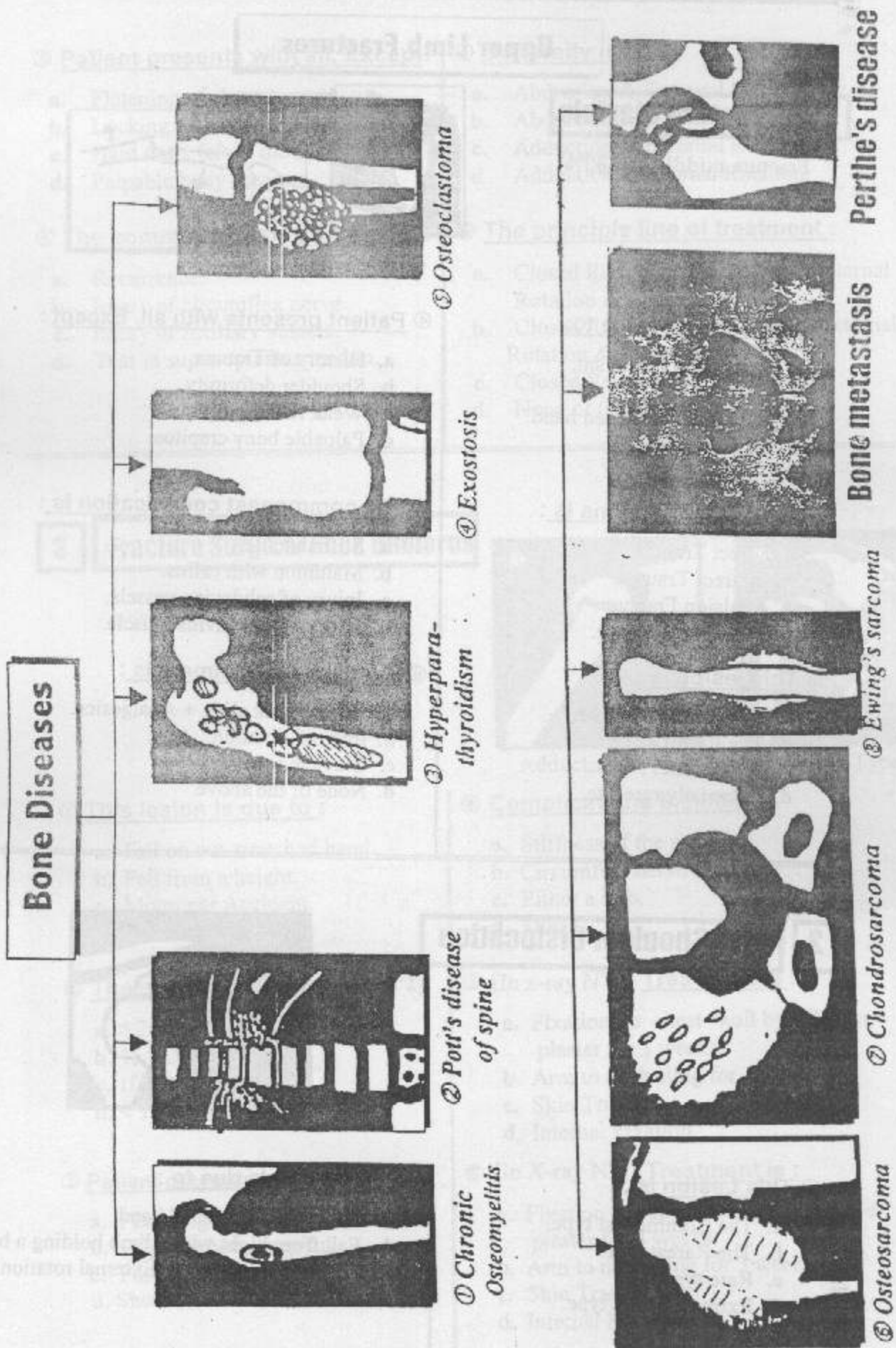
⑦ # Shaft Radius & Ulna



⑧ Colle's #

Lower Limb Fractures





Upper Limb Fractures

1 Fracture Clavicle

Fracture middle 1/3 (80%)



① This Lesion is due to:

- a. Hyperparathyroidism.
- b. Missile injury.
- c. Fall on out-stretched hand.
- d. All of the above.
- e. None of the above.

② The Type of Trauma is :

- a. Direct Trauma.
- b. Indirect Trauma.
- c. Avulsion Fracture.
- d. None of the above.

③ This lesion is :

- a. The commonest site.
- b. The Rarest site.
- c. A Rare site.
- d. Extremely rare site.

④ Patient presents with all, Except :

- a. History of Trauma.
- b. Shoulder deformity.
- c. Weak radial pulse.
- d. Palpable bony crepitus.

⑤ The commonest complication is :

- a. Stiff shoulder.
- b. Malunion with callus.
- c. Injury of subclavian vessels.
- d. Injury of subclavius muscle.

⑥ Best line of Treatment is :

- a. Arm to neck sling + Analgesics.
- b. Internal Fixation.
- c. Clavicle rings.
- d. None of the above.

2 Ant. Shoulder Dislocation



① This Lesion is :

- a. The Commonest type.
- b. The Rarest type.
- c. Rare type.
- d. Extremely rare type.

② This lesion is due to :

- a. Fall on out-stretched hand.
- b. Fall from height with a limb holding a bar.
- c. Forcible extension or External rotation of arm.
- d. All of the above.

③ Patient presents with all, Except:

- a. Flattening of shoulder contour.
- b. Locking of shoulder movements.
- c. Hard mass felt in the axilla.
- d. Palpable bony crepitus.

④ The commonest complication is:

- a. Recurrence.
- b. Injury of circumflex nerve.
- c. Injury of Axillary vessels.
- d. Tear in supra-spinatus tendon.

⑤ Deformity is :

- a. Abduction & External Rotation
- b. Abduction & Internal Rotation.
- c. Adduction & External Rotation.
- d. Adduction & Internal Rotation.

⑥ The principle line of treatment :

- a. Closed Reduction + Fixation in Internal Rotation & Adduction.
- b. Closed Reduction + Fixation in External Rotation & Abduction.
- c. Closed Reduction
- d. None of the above.

3

Fracture Surgical Neck Humerus



Adduction Type



Abduction Type

① This lesion is due to :

- a. Fall on out-stretched hand.
- b. Fall from a height.
- c. Motor car Accident.
- d. Missil injury.

② The age of patient [in x-ray N°2]:

- a. > 20 years.
- b. 15 – 20 years.
- c. 10 – 15 years.
- d. < 10 years.

③ Patient presents with all, Except:

- a. Flattening of shoulder contour.
- b. Palpable bony crepitus.
- c. Partial limitation of shoulder.
- d. Shock

④ Complications include :

- a. Stiffness of the shoulder.
- b. Circumflex nerve injury.
- c. Either a or b.
- d. Shock.

⑤ [In x-ray N°1]: Treatment is :

- a. Fixation to chest wall by adhesive plaster for 3 weeks.
- b. Arm to neck sling for 3 weeks.
- c. Skin Traction.
- d. Internal Fixation

⑥ [In X-ray N°2] Treatment is :

- a. Fixation to chest wall by adhesive plaster for 3 weeks.
- b. Arm to neck sling for 3 weeks.
- c. Skin Traction.
- d. Internal Fixation.

4

Fracture shaft of Humerus



① The Type of fracture is :

- a. Traumatic.
- b. Pathological.
- c. Avulsion.
- d. None.

② The deformity in this x-ray is :

- a. Angulation.
- b. Lateral displacement.
- c. Impaction.
- d. None of above.

③ Patient presents with all, Except

- a. Pain.
- b. Swelling.
- c. Abduction deformity.
- d. Shock.
- e. Limitation of movement.

④ The Commonest injured structure is :

- a. Median nerve.
- b. Axillary nerve.
- c. Radial nerve.
- d. Ulnar nerve.

⑤ The commonest delayed complication is

- a. Mal - union.
- b. Non - union.
- c. Radial nerve injury.
- d. None of the above.

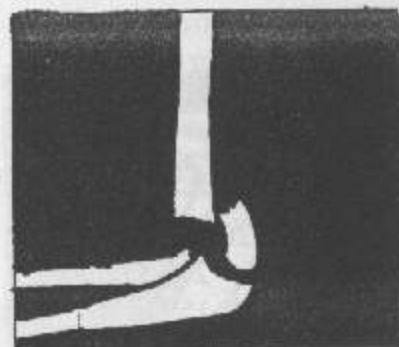
⑥ The principle line of treatment :

- a. Open Reduction + plate & screws.
- b. Closed Reduction + U shaped slab.
- c. Closed Reduction + Arm to neck sling.
- d. None.

5

Supra-Condylar Fracture Humerus

Extension Type (99%) →



① The causative trauma is :

- a. Fall on out-stretched hands.
- b. Fall on Elbow Joint.
- c. Rotation injury.
- d. None of the above.

② The Deformity is :

- a. Flexion Type.
- b. Extension Type.
- c. Abduction Type.
- d. Adduction Type.

③ Patient presents with all, Except:

- a. Diffuse oedema around elbow.
- b. Palpable bony crepitus.
- c. No shortening of arm.
- d. Weak radial pulse.

④ Complications don't include :

- a. Myositis ossificans.
- b. Volkman's ischaemic contracture.
- c. Sudeck's Atrophy.
- d. Cubitus varus or valgus.

⑤ The Essential step during & After reduction is:

- a. Application of plaster cast.
- b. Correction of carrying angle.
- c. Feeling the Radial pulse.
- d. All of the above.

⑥ Best line of treatment is :

- a. External fixation in Extension.
- b. External fixation in Flexion.
- c. Internal fixation.
- d. Skin Traction.

6

Posterior Elbow Dislocation



① This x-ray is :

- a. Ant. Elbow dislocation.
- b. Post. Elbow dislocation.
- c. Supra-condylar fracture humerus.
- d. None of the above.

② The causative trauma is :

- a. Fall on out-stretched hand.
- b. Direct blow.
- c. Fall from a height.
- d. Fall on tip of Elbow.

③ This lesion may associated with

- a. Fracture coronoid process only.
- b. Fracture olecranon process only.
- c. a & b.
- d. None of the above.

④ Patient presents with all, except :

- a. Swelling around elbow.
- b. Shortening of the arm.
- c. Locking of elbow movements.
- d. Disturbed 3 bony prominences around elbow.

⑤ All are complications, Except :

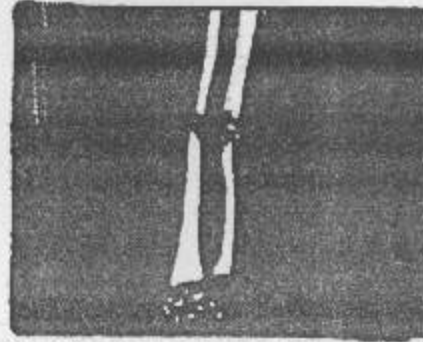
- a. Stiff Elbow joint.
- b. Fracture coronoid process.
- c. Cubitus angle deformity.
- d. Myositis ossificans.

⑥ The Treatment is :

- a. Closed Reduction + above Elbow cast in flexion.
- b. Closed Reduction + above Elbow cast in extension.
- c. Open Reduction + Internal Fixation.

7

Fracture shaft of ulna & Radius



① Cause of this lesion is:

- a. Fall on out-stretched hand.
- b. Direct Trauma.
- c. Fall from a high.
- d. All of the above.
- e. None of the above.

② This Type of fracture is always :

- a. Stable.
- b. Unstable.
- c. a or b.
- d. None of above.

③ The commonest complication is :

- a. Mal-union.
- b. Non-union.
- c. Cross-union.
- d. Sound-union.

④ The Deformity is (in this x-ray) :

- a. Angulation.
- b. Over-riding.
- c. Impaction.
- d. Lateral displacement.

⑤ Best line of Treatment is :

- a. Closed Reduction + Int. Fixation.
- b. Open Reduction + Ext. Fixation.
- c. Open Reduction + Int. Fixation.
- d. None of above.

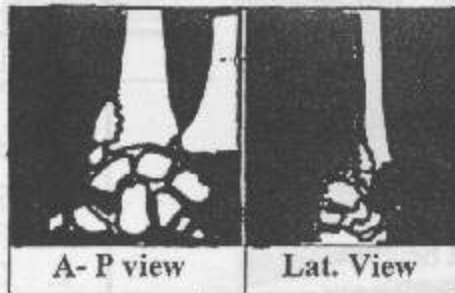
⑥ Internal Fixation by :

- a. Plate & Screws (6 weeks).
- b. Smith peterson nail.
- c. Intra-medullary nail.
- d. None.

8

Colle's Fracture

Fracture of distal inch of
Radius.



① This lesion is due to :

- a. Fall on out-stretched hand.
- b. Direct trauma.
- c. Stress fracture.
- d. Any of the above.

② This lesion occurs in :

- a. Children.
- b. Adult Male.
- c. Old Female.
- d. Old Male.

③ Common associated injuries are :

- a. Fracture styloid process of ulna.
- b. Fracture styloid process of Radius.
- c. Tear of Triangular ligament between Radius & Ulna.
- d. All of the above.

④ The deformity is called :

- a. Dinner Fork deformity.
- b. Old women's Deformity
- c. a & b.
- d. Mad lung deformity.

⑤ Patient does not present with :

- a. History of Trauma.
- b. Swelling.
- c. Pain.
- d. Dinner fork deformity.
- e. Crepitus & Abnormal mobility.

⑥ Complications do not include :

- a. Mal-union.
- b. Sudeck's atrophy.
- c. Myositis ossificans.
- d. Median nerve injury.

⑦ The distal segment is displaced :

- a. Upwards, forwards & laterally.
- b. Upwards, backwards & laterally.
- c. Upwards, backwards & medially.
- d. Downwards, forwards & laterally.

⑧ Reduction is done by :

- a. 2 hand grip method.
- b. 3 hand grip method.
- c. No special Technique.
- d. Bohler's splint.

⑨ Plaster cast should extend from :

- a. Below elbow to below wrist.
- b. Above elbow to above wrist.
- c. Below elbow to above wrist.
- d. Above elbow to below wrist.

⑩ The Time for immobilization is :

- a. 6 week.
- b. 3 weeks.
- c. 8 weeks.
- d. Any of above.
- e. None of above.

Lower Limb Fractures

1

Fracture Pelvis

[A] Solitary Fracture of pelvis :

e.g. Fracture pubic rami →



① This lesion is due to :

- a. Direct blow on the side or front of pelvis.
- b. Rolling on by a falling horse.
- c. Run-over accident.
- d. Side to side crushing force.

② This lesion is called :

- a. Simple fracture pelvis.
- b. Butter fly fracture pelvis.
- c. Open book fracture pelvis.
- d. None of the above.

③ Patient present with all, Except:

- a. History of direct Trauma.
- b. Hypovolaemic shock.
- c. Bleeding per urethra.
- d. Limbing.

④ All are complications, Except :

- a. Oedema of the lower limb.
- b. Hip joint stiffness.
- c. Pulmonary Embolism.
- d. Rupture urethra.

⑤ All are investigations, Except :

- a. C.V.P.
- b. Plain x-ray abdomen.
- c. Pelvic C.T. scan.
- d. Cystography.

⑥ Principle line of Treatment is :

- a. Open Reduction + Internal fixation.
- b. Closed Reduction + Hip spica.
- c. Skeletal Traction.
- d. Rest in bed + Analgesics.

[B] Double Fracture of pelvis :

Double fracture in Ant.
Segment e.g Butter fly



① The lesion is due to :

- a. Fall from a Height.
- b. Run-over accident.
- c. Rolling on by a falling horse.
- d. Side to side crushing force.

② The lesion is called :

- a. Simple fracture pelvis.
- b. Butter fly fracture.
- c. Open book fracture.
- d. None of the above.

③ Patient presents with all, Except :

- a. Hypovolaemic shock.
- b. Bleeding per urethra.
- c. Bleeding per rectum.
- d. Difficulty to lift the leg.

④ All are complications, Except :

- a. DVT.
- b. Shock.
- c. Non union.
- d. Rupture bladder.

⑤ The commonest complication is :

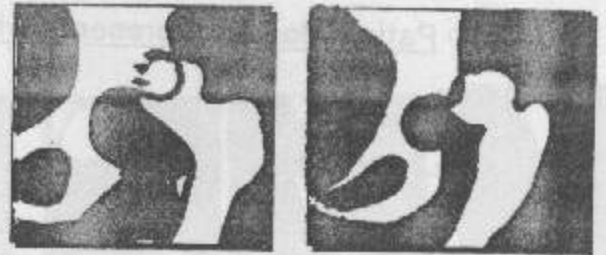
- a. DVT.
- b. Shock.
- c. Pulmonary Embolism.
- d. Rupture urethra.

⑥ Treatment is :

- a. Reduction + Hip spica (6 weeks).
- b. Rest in bed + Analgesics.
- c. Skeletal Traction.
- d. Any of the above.

2

Post. Dislocation of Hip Joint



① The Causative Trauma is :

- Car accident while patient in the front seat.
- Fall of heavy object on pelvis of a person leaning forwards.
- a. & b.

② This Lesion is :

- The commonest.
- Common.
- Rarest.
- Rare.

③ The Commonest Radiological sign is:

- Interrupted Shenton's line.
- Disrupted Nelton's line.
- Unequal chean parallel line.
- Disrupted bryant's Triangle.

④ The Commonest Deformity is :

- Flexion, Adduction & Int. rotation.
- Extension, Abduction & Ext.
- Flexion, Abduction & Int.
- Extension, Adduction & Ext.

⑤ Patient presents with all, Except:

- Loss of Hip Joint movement.
- Pain localized to hip joint.
- Head of femur felt in an abnormal position.
- Hypovolaemic shock.

⑥ The Treatment

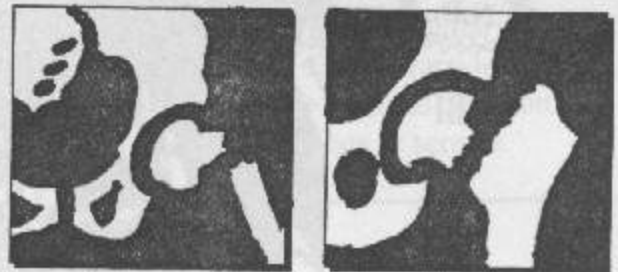
is :

- Closed Reduction + Hip spica.
- Open Reduction + Int. Fixation.
- Skeletal Traction.
- Hip Joint Arthroplasty.

3

Fracture Neck Femur

Trans-cervical Fracture :



① This Lesion is common with :

- Old age.
- Young.
- Adult.
- Any of the above.

② Type of this Lesion is :

- Subcapital.
- Transcervical.
- Basal.
- Inter-Trachanteric.
- Subtrochanteric.

③ Patient does not presents with :

- a. Pain.
- b. Shortening.
- c. Deformity.
- d. Fever.

④ Complications do not include :

- a. Avascular necrosis of Head.
- b. D.V.T.
- c. Fever.
- d. Stiffness of Hip Joint.

⑤ All may be lines of treatment except :

- a. Smith peterson nail.
- b. Partial Hip Arthroplasty.
- c. Total Hip Arthroplasty.
- d. Plate & screws.

⑥ The main Treatment is :

- a. Closed Reduction + Skin Traction.
- b. Closed Reduction + Skeletal Traction.
- c. Open Reduction + Plate & screws.
- d. Partial Hip Arthroplasty.



Partial Hip Arthroplasty

Austin – moore



⑦ Indicated with all, Except :

- a. Hip dislocation.
- b. Avascular necrosis of femur head.
- c. Early osteoclastoma of femur head.
- d. Hyperparathyroidism of femur head.

⑧ All are complications, Except :

- a. Osteomyelitis of femur.
- b. Loss of rang of mobility of Hip Joint.
- c. Stiffness of Hip Joint.
- d. D.V.T.



MRI



MRI shows :
Normal head of femur

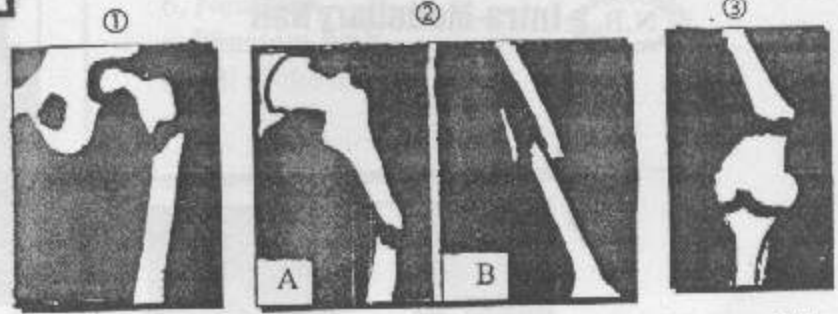


MRI shows :
Avascular necrosis of head of femur

[Orthopaedics]

4

Fracture shaft Femur



Upper 1/3

Middle 1/3

Lower 1/3

① [In X-ray N°2] The Trauma is :

- a. Direct.
- b. Indirect.
- c. Avulsion.
- d. None.

② [In x-ray N°3] Age of patient is :

- a. > 30 years.
- b. 25 - 30 years.
- c. 20 - 25 years.
- d. < 20 years.

③ [In x-ray N° 2A] The deformity is:

- a. Impaction.
- b. Angulation.
- c. Lateral displacement.
- d. None of the above.

④ [In x-ray N° 2 B] The fracture is :

- a. Transverse.
- b. Oblique.
- c. Comminuted.
- d. Spiral.

⑤ Patient presents with all, Except :

- a. Shock.
- b. Pain.
- c. Deformity.
- d. Fever.

⑥ [In x-ray N°1 & 2] All are complications, Except :

- a. Shock.
- b. Paralytic Ileus.
- c. Ischaemic leg contracture.
- d. Pain

⑦ [In x-ray N° 1 & 2A] Treatment is :

- a. Open Reduction + Intra-medullary nail.
- b. Closed Reduction + Skin Traction.
- c. Closed Reduction + skeletal Traction.
- d. Open Reduction + plate & screws.

⑧ [In x-ray N° 3] Treatment is :

- a. Open Reduction + Intra-medullary.
- b. Closed Reduction + skin Traction.
- c. Closed Reduction + Skeletal Traction.
- d. Open Reduction + plate & screws.



In This x-ray

Fracture shaft femur
The Age of this patient
(<15 years)

So the line of Treatment is
skin Traction on Thomas splint



N.B. Intra-Medullary Nail



Intra-medullary Nail
Femur
Callus

⑨ This x-ray shows:

- a. Fracture middle 1/3 femur.
- b. Evidence of callus formation.
- c. Sound union.
- d. All of the above.
- e. None of the above.

⑩ This x-ray doesn't show :

- a. Anatomical reduction.
- b. Intra-medullary nail.
- c. Smith peterson nail.
- d. Callus formation.

⑪ All are Indications, Except :

- a. Adult.
- b. Fit patient.
- c. Patient 5 – 15 years.
- d. Pathological fracture.

⑫ All are contraindications, Except :

- a. Comminuted fracture.
- b. Fracture shaft femur (child).
- c. Supra-condylar fracture femur.
- d. Fracture shaft femur (Adult).

⑬ All are complications, Except :

- a. Infection.
- b. Fat Embolism.
- c. Fracture of the Femur.
- d. Mal-union.

⑭ If contraindicated, we do

- a. Skeletal Traction on Bohler's.
- b. Skin Traction on Thomas splint.
- c. External skeletal fixation.
- d. None of Above.



Amputation stump



① This X-ray shows :

- a. Above knee amputation.
- b. Below knee amputation.
- c. Disarticulation of knee joint.
- d. None of the above.

③ The amputation stump is :

- a. Ideal stump regarding length.
- b. Too long stump.
- c. Too short stump.
- d. None of the above

② All are indications, except :

- a. Vascular disease.
- b. Limb deformity.
- c. Malignant tumor of the limb.
- d. Chronic osteomyelitis.

④ The patient is liable as complication

- a. Osteomyelitis.
- b. Neuroma.
- c. Phantom limb.
- d. All of the above.



Fracture patella



① This fracture always :

- a. Stable.
- b. Unstable.
- c. Compound.
- d. Comminuted.

③ The commonest complication is :

- a. Sudack's atrophy.
- b. Non union.
- c. Myositis ossificans.
- d. Haemarthrosis.

② The patient presents with all, except :

- a. Effusion of the knee joint.
- b. Inability of knee extension.
- c. Pain.
- d. Distal ischaemic manifestation.

④ The line of treatment include :

- a. Closed reduction + above knee cast.
- b. Partial patellectomy.
- c. Total patellectomy.
- d. Wire.
- e. All of the above.

5

Fracture Tibia & Fibula

[A] Fracture Tibia alone



① The Causative Trauma is :

- a. Direct.
- b. Indirect.
- c. Avulsion.
- d. None.

② The Fissure is :

- a. Transverse.
- b. Oblique.
- c. Spiral.
- d. Comminuted.

③ This Fracture is always :

- a. Stable.
- b. Unstable.
- c. a or b.
- d. None.

④ Patient presents with all, Except :

- a. Palpable bony crepitus.
- b. Wasting of peroneal muscle.
- c. Shock.
- d. Traumatic wound.

④ All are complications, Except :

- a. Mal-union.
- b. Non-union.
- c. Cross union.
- d. None.

⑤ The main Treatment is :

- a. Open Reduction + Plate & screws.
- b. Open Reduction + Intra medullary Nail.
- c. Closed Reduction + Cast (3 months).
- d. None.

[B] Fracture Tibia & Fibula



① The Causative trauma is :

- a. Direct.
- b. Indirect.
- c. Avulsion.
- d. None.

② The fissure is :

- a. At same level & Transverse.
- b. At different level & Oblique.
- c. Spiral.
- d. Comminuted.

③ The Fracture is always :

- a. Stable.
- b. Unstable.
- c. a or b.
- d. None.

④ Patient presents with all, Except :

- a. History of Trauma.
- b. Inability to walk.
- c. Palpable bony crepitus.
- d. Traumatic Anuria.

⑤ Complications include :

- a. Non-union.
- b. Mal-union.
- c. Cross union.
- d. All of the above.

⑥ The main Treatment is :

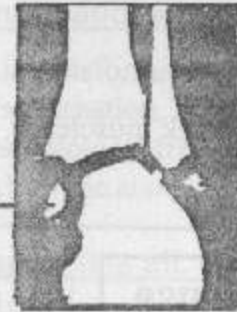
- a. Open Reduction + Plate & screws for tibia alone.
- b. Open Reduction + Plate & screws for Tibia & fibula.
- c. Closed Reduction & Ext. fixation.
- d. None.

6 Pott's Fracture of Ankle

N.B. : If 1 maleolus fracture = 1st Degree.

But If 2 malcoli fracture = 2ny Degree.

Medial Malleolus



Lateral Malleolus

① This x-ray shows :

- a. Fracture lat. maleolus.
- b. Fracture med. Maleolus.
- c. a & b.
- d. None of Above.

② The Radiological Evidence is :

- a. 1st degree.
- b. 2nd degree.
- c. 3rd degree.
- d. None of the above

③ The deformity is:

- a. Abduction eversion.
- b. Adduction inversion.
- c. Vertical compression.
- d. Any of above.

④ The patient presents with :

- a. History of Trauma.
- b. Pain & oedema.
- c. Ankle displacement.
- d. All of the above.

⑤ All are complications, Except :

- a. Non-union.
- b. Dislocation of Ankle.
- c. Sudeck's Atrophy.
- d. Limbing.

⑥ The line of Treatment is :

- a. Closed Reduction + Below knee cast.
- b. Open Reduction + Int. Fixation.
- c. Closed Reduction + Skin Traction.
- d. None.

7 Fracture spine



Wedge compression fracture of the spine

① The underlying aetiology is :

- a. Traumatic.
- b. Inflammatory.
- c. Degenerative.
- d. Neoplastic.

③ All are investigations except :

- a. Myodil study.
- b. C.T. spine.
- c. M.R.I. spine.
- d. E.M.G.

- ② The patient presenting with all except :
- Sever pain.
 - Internal bleeding.
 - Spasm of the back muscles.
 - T.B. toxæmia.

- ④ All may be treatment, except :
- Rest in bed + physiotherapy.
 - Injection of intralesional steroid.
 - Open reduction + internal fixation
 - External fixation by plaster jacket.

8 Disc prolapse

- (A) Myelography :
by myodil
(B) MRI



- ① The underlying aetiology is
- Traumatic.
 - Inflammatory.
 - Degenerative.
 - Neoplastic.

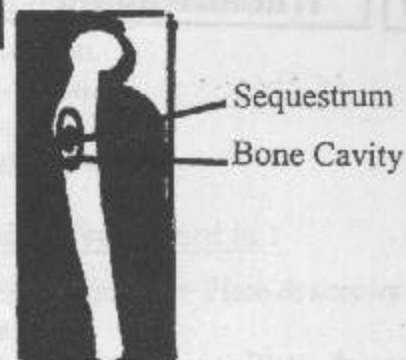
- ③ All are investigations, except :
- Myodil study.
 - C.T. spine.
 - MRI spine.
 - Manometric study.

- ② The patient presents mainly by:
- Motor & sensory changes.
 - Low backache.
 - a + b.
 - Retrosternal pain.

- ④ The principle line of treatment is:
- Conservative.
 - Laminectomy operation.
 - Corticosteroids.
 - Heller's cardiomyotomy.

Bone Diseases

1 Chronic Osteomyelitis



- ① This X-ray shows :
- Bone Thickness.
 - Sequestrum.
 - Bony cavity.
 - All of the above

- ② This Lesion is due to :
- Congenital.
 - Traumatic.
 - Neoplastic.
 - Inflammatory.

③ The Lesion is due to :

- a. Inadequately treated acute osteomyelitis.
- b. Acute pyogenic abscess.
- c. a & b.

④ Patient presents with all, Except :

- a. Thickened tender bone.
- b. Tender skin over.
- c. Remission & Exacerbation.
- d. Multiple sinuses.

⑤ Complications include :

- a. Limb deformity.
- b. Exacerbation.
- c. Pathological fracture.
- d. All of the above.

⑥ Treatment is all, Except :

- a. Sequestrectomy.
- b. Saucerization.
- c. Winnet orr Technique.
- d. Radiotherapy.

2 Pott's disease of spine T.B disease

More than one vertebra are affected with destruction of Inter-vertebral disc.



Cold Abscess

① This Lesion is due to :

- a. Fracture.
- b. Syphilis.
- c. T.B.
- d. Metastasis.

② The main presentation is :

- a. Cold Abscess.
- b. Paraplegia.
- c. Pain.
- d. Spine deformity.

③ Patient presents with :

- a. Low grade fever.
- b. Haemoptysis.
- c. Paraplegia.
- d. All of the above.

④ All are essential Investigations, Except

- a. Chest x-ray.
- b. Tuberculin test.
- c. MRI spine.
- d. Abdominal U/S.

⑤ The main Treatment is :

- a. Anti T.B + spinal support.
- b. Open Reduction + Int. fixation.
- c. Closed Reduction + plaster Jacket.
- d. Physiotherapy & Rehabilitation.

⑥ Treatment of Reversible paraplegia is :

- a. Lateral Rachotomy.
- b. Laminectomy.
- c. Costo-Transversectomy.
- d. None.

3

Hyperparathyroidism

Osteitis fibrosa cystica
(multiple bone cysts)
of femur.



① This x-ray shows :

- a. Rarification of bone.
- b. Multiple cysts.
- c. a & b.
- d. None of the above.

② The lesion is due to :

- a. Parathyroid Tumor.
- b. Parathyroid Hyperplasia.
- c. a or b.
- d. None of the above.

③ The patient presents with all, Except:

- a. History of Trauma.
- b. Pathological fracture.
- c. Neck swelling.
- d. Malignant bone changes.

④ The following occur, Except

- a. ↑ Serum Ca level.
- b. ↑ Serum parathormone.
- c. ↓ Serum phosphorus.
- d. ↑ Serum phosphorus.

⑤ All are Investigations, Except :

- a. Neck sonar.
- b. Skeletal x-ray.
- c. Serum parathormone.
- d. Bone scan.

⑥ The Treatment is :

- a. Surgical Removal of parathyroid gland.
- b. Open reduction + Int. fixation.
- c. Ca supplementaion + vit. D.
- d. Radiotherapy.

4

Osteochondroma

Exostosis = Cartilage Capped Exostosis

The only Tumor has a pedicle which
Arises from metophysis away from Epiphysis.



① The Aetiology is :

- a. Malignant.
- b. Endocrinal.
- c. Localized disturbance of bone growth
- d. None.

② The Age of the patient :

- a. < 10 years.
- b. 10-20 years.
- c. 20 years.
- d. None.

③ The patient presents with all, Except

- a. Egg shell crakling sensation.
- b. Painless swelling.
- c. Limitation of knee movement.
- d. Distal limb paraesthesia.

④ Complications include :

- a. Mechanical block of knee Joint.
- b. Fracture of pedicle.
- c. Sarcoma 5%.
- d. All of the above.

⑤ Complications do not include :

- a. Distal paraesthesia.
- b. Pathological fracture.
- c. Deformity.
- d. Osteomyelitis.

⑥ The Treatment is :

- a. Radiotherapy.
- b. Surgical Excision + Biopsy.
- c. Amputation.
- d. Physiotherapy.

5

Osteoclastoma (Giant Cell Tumor)

(Locally Malignant)

- It arises from **Epiphysis** > 20 years.
- It shows - Soap bubbles appearance.
- Medullary plug of fibula.



① This x-ray shows :

- a. Bone Expansion.
- b. Soap bubbles appearance.
- c. Well defined mass.
- d. All of the above.

② x-ray does not show :

- a. Patient > 20 years.
- b. Medullary plug.
- c. Epiphyseal lesion.
- d. Codman's Triangle.

③ The patient presents with all, Except

- a. Painless mass.
- b. Well defined mass.
- c. Egg shell crakling sensation.
- d. Overlying skin inflammation.

④ The commonest complication is :

- a. Sarcoma.
- b. Recurrency.
- c. Pathological fracture.
- d. Pain.

⑤ The most important investigation is :

- a. Blood picture.
- b. Open biopsy.
- c. CT scan.
- d. Plain x-ray.

⑥ The Treatment is :

- a. Excision with safety margin.
- b. Amputation.
- c. Radiotherapy.
- d. Curretage + Bone graft.

6

Osteosarcoma

- It arises from Metaphysis.
- It shows
 - Sun Rays.
 - Bone Ghost.
 - Codman's Δ



The MRI shows the extent of the lesion.

① This x-ray shows :

- Metaphyseal destruction.
- Codman's Triangle.
- Bone ghost.
- All of the above.
- None of the above.

② The Nature of this lesion is :

- Osteoclastoma.
- Osteosarcoma.
- Chondrosarcoma.
- Ewing's sarcoma.

③ The Earliest presentation is :

- Severe pain.
- Swelling.
- Cachexia.
- All of the above.

④ Complications include :

- Lung metastasis.
- Pathological fracture.
- Cachexia.
- All of the above.

⑤ The important Investigation is :

- Chest x-ray.
- Biopsy.
- Plain x-ray.
- Blood picture.

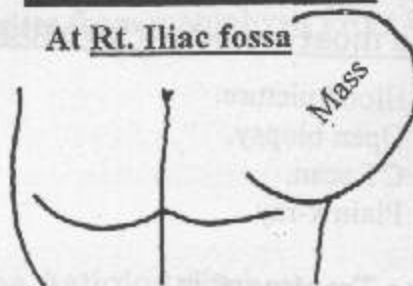
⑥ The Treatment is :

- Radiotherapy.
- Amputation.
- Chemotherapy.
- Pre & post Amputation Radiotherapy i.e. Triple attack.

7

Chondrosarcoma

At Rt. Iliac fossa



Fluffy Cotton appearance



① This x-ray shows :

- Destruction of the bone outlines.
- Radiolucent areas spotted with areas of calcification (fluffy cotton).
- Soft tissue shadow.
- All of the above.

② The site of this lesion is :

- The Commonest.
- The Rarest.
- Rare.
- Extremely rare.

③ The Age of the patient is :

- a. 10 – 20 years.
- b. 20 – 30 years.
- c. 30 – 40 years.
- d. 40 – 50 years.

④ Patient presents with :

- a. Dull ache pain.
- b. Gradual mass.
- c. Pathological fracture.
- d. All of the above.

⑤ The Treatment is :

- a. Radiotherapy.
- b. Wide local resection + Prothesis.
- c. Amputation.
- d. Chemotherapy.

⑥ The lesion is mainly :

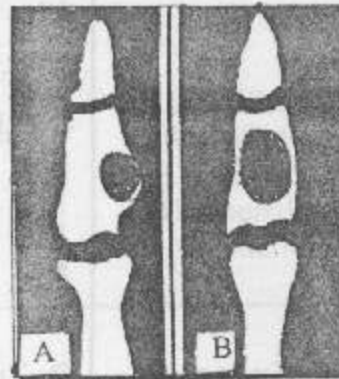
- a. Radio-sensitive.
- b. Radio-resistant.
- c. Radio-responsive.
- d. Radio-curative.



Chondroma

Central osteolytic lesion of phalanx.

- a. Ecchondroma.
- b. Enchondroma.



① The lesion is :

- a. Congenital.
- b. Traumatic.
- c. Inflammatory.
- d. Neoplastic

② The pathological nature is:

- a. Ecchondroma.
- b. Enchondroma.
- c. T.B. dactylitis.
- d. Bone cyst.

③ The patient can presents with:

- a. Steady continous growth.
- b. Hard bony swelling.
- c. Pathological fracture.
- d. Malignant changes.
- e. All of the above.

④ The patient presents by all except:

- a. Toxaemia and weight loss.
- b. Deformity.
- c. Painless swelling.
- d. Wasting of related muscles.

⑤ The patient can presents will all except :

- a. Egg shell cracking sensation.
- b. shortening of the affected bone.
- c. Multiple similar lesions in phalanx.
- d. Deformity of affected bone.

⑥ The principle line of treatment is:

- a. Leave alone.
- b. Curettage + bone graft.
- c. Chemotherapy.
- d. Radiotherapy.
- e. Amputation.

8

Ewing's Sarcoma

- It arises from Diaphysis.
- It shows Onion peel appearance.



① This x-ray shows :

- Onion peel appearance.
- Raised periosteum.
- Diaphyseal destruction.
- All of the above.

② This lesion is :

- Metaphyseal.
- Epiphyseal.
- Diaphyseal.
- None.

③ Patient presents with all, Except

- Severe pain at site of lesion.
- Pathological fracture.
- Marked cachexia.
- Limitation of movement.

④ The presenting feature is :

- Painful mass.
- Warm mass.
- Intermittent ↑ in Temp.
- All of the above.

⑤ D.D from :

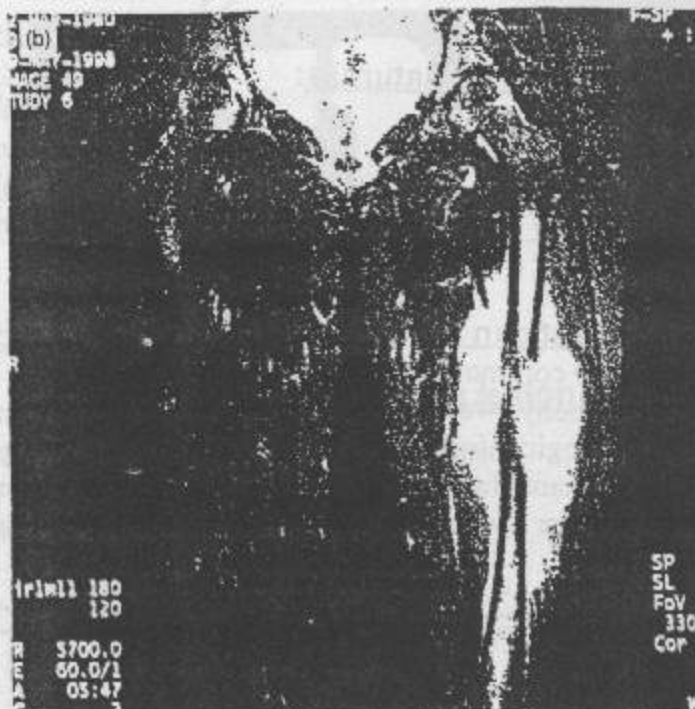
- Acute osteomyelitis.
- Chronic osteomyelitis.
- Hyperparathyroidism.
- None of above.

⑥ Treatment is :

- Chemotherapy alone.
- Radiotherapy alone.
- Amputation.
- a & b then c

N.B.

**MRI shows
Ewing's Sarcoma**



9 Bone metastasis

① The common 1ry lesions are :

- a. Breast.
- b. Prostate.
- c. Lung.
- d. Kidney.
- e. All of the above.

③ The essential Investigations are

- a. Bone scan.
- b. Mammography.
- c. Thyroid scan.
- d. Trans-rectal U/S.
- e. All of the above.

② The patient presents with:

- a. Pathological fracture.
- b. Bony aches.
- c. Limping.
- d. All of the above.

④ All are lines of treatment, except :

- a. Radiotherapy.
- b. Chemotherapy.
- c. Hormonal treatment.
- d. Amputation.

10 Perthe's disease

- Flattening & fragmentation of femoral head.
- Coxa vera deformity.
- Epiphyseal disease.



① The Pathological nature is:

- a. Congenital.
- b. Traumatic.
- c. Inflammatory.
- d. Neoplastic.

③ The commonest complication is :

- a. Osteomyelitis.
- b. Sudeck's atrophy.
- c. Hip joint dislocation.
- d. Myositis ossificans.

② The underlying aetiology is :

- a. Avascular necrosis.
- b. Septic arthritis.
- c. T.B. hip joint.
- d. None of the above.

④ The principle line of treatment is:

- a. Rest in bed + traction.
- b. Smith Peterson nail.
- c. Austin moore operation.
- d. Antibiotics + rest in bed.

Answers



Upper Limb Fractures

1 Fracture clavicle

1. c 2. b 3. a 4. c 5. b 6. a

2 Ant. Shoulder dislocation

1. a 2. d 3. d 4. a 5. a 6. a

3 Fracture Surgical Neck Humerus

1. a 2. b 3. d 4. c 5. b 6. a

4 Fracture shaft of Humerus

1. a 2. b 3. d 4. c 5. b 6. b

5 Supra-condylar Fracture Humerus

1. a 2. b 3. c 4. c 5. c 6. a

6 Post. Elbow Dislocation

1. b 2. a 3. a 4. b 5. d 6. a

7 Fracture Shaft of Ulna & Radius

1. b 2. b 3. c 4. d 5. c 6. a

8 Colle's Fracture

1. a 2. c 3. d 4. c 5. c 6. c 7. b 8. b 9. a 10. a

Lower Limb Fractures

1 Fracture Pelvis

(A) Solitary Fracture pelvis : 1. a 2. a 3. c 4. d 5. d 6. d

(B) Double Fractures pelvis : 1. d 2. b 3. c 4. c 5. b 6. a

2 Post. Dislocation of Hip Joint

1. c 2. a 3. a 4. a 5. d 6. a

3 Fracture Neck Femur

1. a 2. b 3. d 4. c 5. d 6. d 7. d 8. c

4 Fracture Shaft Femur

1. a 2. d 3. b 4. c 5. d 6. c 7. a 8. d

N.B. : Intramedullary nail

9. d 10. c 11. c 12. d 13. d 14. a

N.B. : Amputation stump :

1. a 2. d 3. a 4. d

N.B. : Fracture patella :

1. b 2. d 3. d 4. e

5 Fracture Tibia & Fibula

(A) Fracture Tibia Alone :

1. b 2. b 3. a 4. c 5. c 6. a

(B) Fracture Tibia & Fibula:

1. b 2. b 3. a 4. d 5. d 6. a

6 Pott's Fracture (Ankle)

1. c 2. b 3. b 4. d 5. d 6. a

7 Fracture spine

1. a 2. d 3. d 4. b

8 Disc prolapse

1. c 2. c 3. d 4. b

Bone disease

1 Chronic Osteomyelitis

1. d 2. d 3. a 4. b 5. d 6. d

2 Pott's Disease of Spine

1. c 2. d 3. d 4. d 5. a 6. a

3 Hyperparathyroidism

1. c 2. c 3. d 4. d 5. d 6. a

4 Osteochondroma Exostosis = Cartilage Capped Exostosis
1. c 2. b 3. a 4. d 5. d 6. b

5 Osteoclastoma (Giant cell Tumor)
1. d 2. d 3. d 4. c 5. b 6. a

6 Osteosarcoma
1. d 2. b 3. a 4. d 5. b 6. d

7 Chondrosarcoma
1. d 2. a 3. d 4. d 5. b 6. b

N.B. : **Chondroma**
1. d 2. According 3. e 4. a 5. a 6. b

8 Ewing's Sarcoma
1. d 2. c 3. c 4. d 5. a 6. d

9 Bone Metastasis
1. e 2. d 3. e 4. d

10 Perthe's disease
1. c 2. a 3. c 4. a

Miscellaneous Radiology

Chapter 4

Miscellaneous X-Rays

Chest X-Rays



① Fracture Ribs



② Haemothorax



③ Tension pneumothorax

Skull X-rays



④ Fissured Fracture



⑤ Depressed Fracture

Mandible X-rays

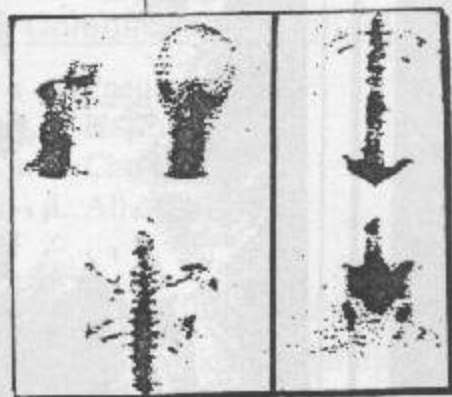


⑥ Submandibular salivary stone



⑦ Parotid sialogram

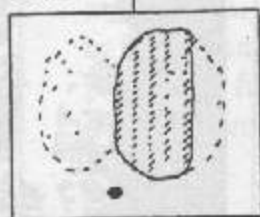
Bone



⑧ Bone Scan

Thyroid

* Hot



* Cold



⑨ Thyroid Scan

Breast



⑨ Soft Tissue Mamography

11

Arteriography

★ **Indicated** with Ischaemia.

★ **Contraindicated** with massive gangrene or Burger's disease

★ **Values** : Give idea about ↗

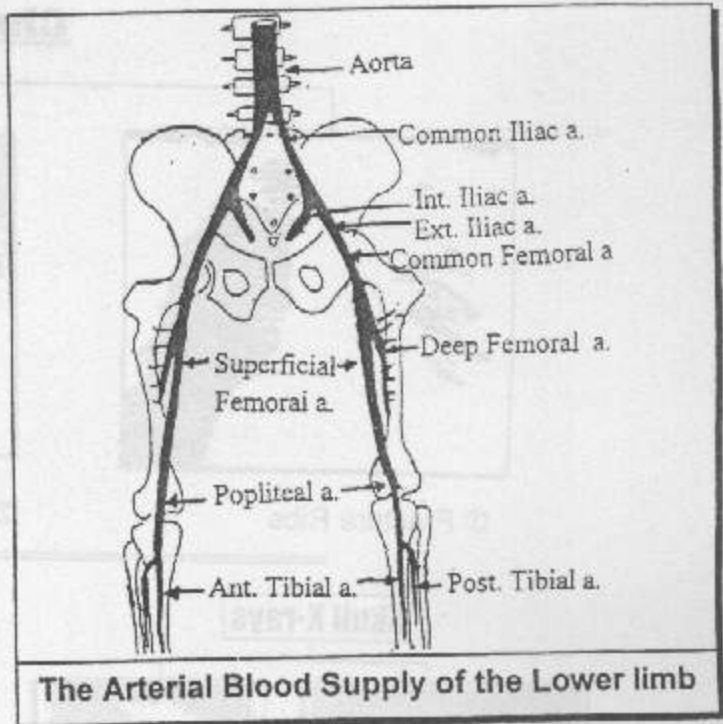
- ① Site & length of obstruction.
- ② State of vessels e.g. stenosis.
- ③ Distal run off & the collateral circulation.

★ **Methods** :

- ① Direct Trans-lumbar Aortography.
- ② Retro-grade femoral Aortography.
- ③ Ante-grade brachial Aortography.

★ **The Needle** : Seldinger needle.

★ **The dye** : Hypaque = urographin.



Examples



Trans-femoral Aortography demonstrating Atherosclerotic changes of the Aorta



Translumbar Aortography demonstrating left common iliac block.



Femoral Arteriography demonstrating right superficial femoral block.

1

Fracture of the Ribs

(Flail Chest)

Multiple fractures of ribs with opacity obliterates the costo-phrenic angle. i.e. Haemothorax.



① This X-ray :

- a. Plain x-ray chest.
- b. Rt. Haemothorax.
- c. Flail chest.
- d. All of the above.

② The Aetiology of this lesion is:

- a. Congenital.
- b. Traumatic.
- c. Inflammatory.
- d. Neoplastic.

③ Patient presents with all, Except:

- a. Severe Rt. Chest pain.
- b. Palpable Rt. Chest crepitus.
- c. Dyspnea & cyanosis.
- d. All of the above.
- e. None of the above

④ Complications include:

- a. Pneumothorax.
- b. Haemothorax.
- c. Chest Infection.
- d. All of the above.

⑤ All are complications, Except :

- a. Paradoxical Respiration.
- b. Pendulum Respiration.
- c. Mediastinal Flutter.
- d. All of the above.
- e. None of the above.

⑥ If uncomplicated lesion the treatment is:

- a. Support the affected side with adhesive plaster.
- b. Inter costal nerve block +Analgesic.
- c. Both a & b.

⑦ If complicated lesion as this x-ray the Treatment is :

- a. Under water seal at 7th space.
- b. Under water seal at 2nd space.
- c. Both a & b.

⑧ Urgent Thoractomy indicated with :

- a. Massive bleeding > 200 ml/h.
- b. Clotted Haemothorax.
- c. Loculated Haemothorax.
- d. Associated Intrathoracic Injuries.
- e. All of the above.

⑨ Surgery consists of :

- a. Excision.
- b. Decortication.
- c. Internal fixation by stainless wire.
- d. Lobectomy.

⑩ Tracheostomy is indicated with :

- a. Severe bleeding.
- b. Old age.
- c. Associated Head injury.
- d. Respiratory Embrrasment
- e. Both c & d.



Don't forget

- **If Fracture Rib (single)** : Treated by ☞
Adhesive plaster + Analgesic or Inter Costal nerve block.
- **If Fracture Rib (Multiple)** : i.e. Flail Chest.
 - a) **Small & Uncomplicated** : Treated as above.
 - b) **Large & Complicated** with Haemothorax.
We do under water seal at 7th intercostal space.

N.B. : **Pneumothorax** :
We do under water seal at 2nd intercostal space.

2

Haemothorax

Opacity obliterates the costo-phrenic angle & rising to the Axilla



① This X-ray shows :

- a. Fluid level on Rt. side.
- b. Lung collapse on Rt. side.
- c. Obliterated Rt. costo-phrenic angle.
- d. All of the above.

② The Aetiology may be , Except:

- a. Trauma.
- b. Rupture Aortic Aneurysm.
- c. Bleeding Tumors.
- d. Congenital.

③ Patient presents with all, Except:

- a. Hypovolaemic shock.
- b. Dyspnea.
- c. ↓ Breath sound on Rt. side.
- d. Collapse neck veins on Rt. side.

④ Examination of Rt. side chest reveals :

- a. Trachea pushed to opposite side.
- b. ↓ Chest movement & ↓ T.V.F.
- c. Dull on percussion.
- d. ↓ breath sound.
- e. All of the above.

⑤ The Diagnostic Investigation is :

- a. Chest x-ray.
- b. CT scan chest.
- c. Thoracocentesis.
- d. None of above.

⑥ The principle line of Treatment :

- a. Under water seal at 7th space.
- b. Under water seal at 2nd space.
- c. Thoracotomy.
- d. All of the above.
- e. None of the above.

[Miscellaneous X-Rays]

3

Tension Pneumothorax

- Total lung collapse with depressed cupola of Lt. Side diaphragm.
- Mediastinum shifted to the opposite side.



① This x-ray shows, Except :

- Total lung collapse at Lt. side.
- Mediastinal shift to opposite side.
- Raised elevated diaphragmatic coupla on the affected side.
- None of the above.

② Patient presents with all, Except:

- Cardio-pulmonary distress.
- Dyspnea & cyanosis.
- Mediastinal shift.
- Mediastinal Flutter.

③ Aetiology may be, Except :

- Penetrating chest injuries.
- Rupture Emphysematous bulla.
- Pneumoperitoneum.
- All of the above
- None of the above.

④ Examination of Lt. side chest reveals all, Except :

- Trachea pushed to opposite side.
- ↓ chest movement & ↓ T.V.F.
- Dull on percussion.
- ↓ Breath sound.

⑤ The most serious complication is :

- Cardio-respiratory distress.
- Neurogenic shock.
- Mediastinum shifting.
- All of the above.

⑥ The principle line of Treatment is :

- Under water seal at 7th space.
- Under water seal at 2nd space.
- Urgent Thoracotomy.
- All of the above.
- None of the above.

4

Fissure Fracture

[Skull]

Fissured Fracture



① This x-ray is :

- Plain x-ray skull.
- Sialogram.
- Angiogram.
- C.T. scan.
- None of the above.

② The Most Radiological sign is :

- Fissured fracture of vault.
- Depressed fracture of vault.
- Fissured fracture of Base.
- Silver beaten appearance.

③ Patient presents with all, Except:

- a. Scalp Haematoma.
- b. Brain contusion.
- c. Intra-cranial Tension.
- d. All of the above.
- e. None of the above.

④ The Main complication is :

- a. Intra-cranial Hge.
- b. Extra-dural Hge.
- c. Meningitis.
- d. All of the above.

⑤ Management of simple Fissure is :

- a. Observation only.
- b. Excision of wound only.
- c. a & b.
- d. None of the above.

⑥ Management of compound fissure :

- a. Observation only.
- b. Excision of wound only.
- c. a & b.
- d. None of the above.

5

Depressed Fracture [Skull]



① The Reliable diagnosis is :

- a. Fissured fracture vault.
- b. Depressed fracture vault.
- c. Fracture base of skull.
- d. Bone metastasis.

② The Aetiology of this lesion is :

- a. Traumatic.
- b. Neoplastic.
- c. Endocrinal.
- d. All of the above.
- e. None of the above.

③ All are complications, Except

- a. Scalp Haematoma.
- b. Brain contusions.
- c. Meningitis.
- d. Subconjunctival Haemorrhage.

④ Investigation of choice is :

- a. Echo-Encephalography.
- b. C.T. scan.
- c. Carotid angiography.
- d. Exploratory hole.

⑤ All are Essential Investigation, Except :

- a. C.T. scan Head.
- b. MRI Brain.
- c. Bone scan.
- d. None of the above.

⑥ The principle line of treatment :

- a. Conservative & Monitoring.
- b. Urgent surgical excision.
- c. Depressed fracture is reduced.
- d. None of the above.

6

Submandibular Salivary Stone



① This X-ray is:

- a. Fracture mandible.
- b. Parotid stone.
- c. Submandibular salivary stone.
- d. Submandibular salivary gland.

② The Aetiology includes :

- a. Infection.
- b. Obstruction.
- c. Both a & b.
- d. Traumatic.

③ Presentations include :

- a. Pain after meal.
- b. Swelling.
- c. Enlarged cervical L.Ns.
- d. All of the above.

④ Complications include:

- a. Fistula.
- b. Sialadenitis.
- c. Sialectazia.
- d. All of the above.

⑤ The Essential Investigation is :

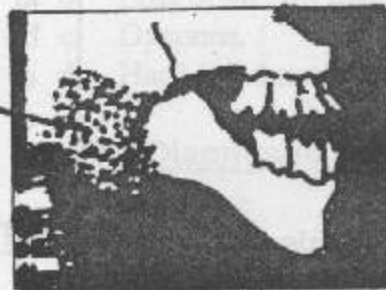
- a. Sialography.
- b. C.T. scan mandible.
- c. L.Ns biopsy.
- d. None of the above.

⑥ The main Treatment is :

- a. Submandibular sialadenectomy.
- b. Removal of stone.
- c. Radiotherapy.
- d. Chemotherapy.

7

Parotid Sialography



① This X-ray is :

- a. Parotid Sialography
- b. Submandibular Sialography.
- c. Sublingual Sialography.
- d. Fracture Mandible.

② The contrast is :

- a. Lipidol.
- b. Hypaque.
- c. Barium.
- d. None.

③ This investigation for all, Except :

- a. Salivary stones.
- b. Sialiectasis.
- c. Salivary fistula.
- d. Sialadenitis.

④ It may shows :

- a. Filling defect in duct system.
- b. Dilatation of duct system.
- c. Strictures of parotid duct.
- d. All of the above.

⑤ In this x-ray, it shows :

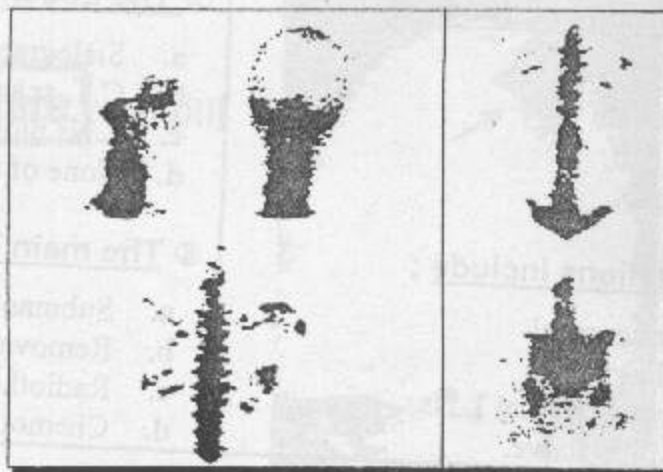
- a. Filling defect in duct system.
- b. Dilated duct system.
- c. Strictured duct system.
- d. All of the above

⑥ The Treatment for this patient :

- a. Sialadenectomy.
- b. Dilate the stricture.
- c. Antibiotics.
- d. All of the above

8

Bone Scan



① This X-ray is :

- a. Plain x-ray.
- b. CT scan bone.
- c. MRI.
- d. None.

④ The pathological cause could be :

- a. Cancer prostate.
- b. Cancer Breast.
- c. Osteosarcoma.
- d. All of the above.

② The dye used in this study is:

- a. Myodil.
- b. Hypaque.
- c. Technetium⁹⁹.
- d. None.

⑤ The Evident Radiological sign :

- a. Hot spots.
- b. Cold spots.
- c. Fracture line.
- d. All of the above.
- e. None of the above.

③ The study is indicated with :

- a. Traumatic fractures.
- b. Congenital diseases.
- c. Bone metastasis.
- d. All of the above.

⑥ The Treatment is :

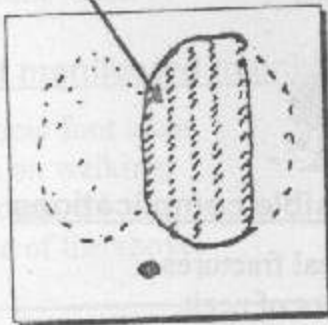
- a. Chemotherapy.
- b. Radiotherapy.
- c. a & b.
- d. According to the cause.

[Miscellaneous X-Rays]

9

Thyroid Scan

[A] Hot Nodule



① This x-ray is :

- a. Hot nodule.
- b. Cold nodule.
- c. Warm nodule.
- d. Normal gland.

② The Diagnosis may be :

- a. Thyroid cyst.
- b. Toxic nodule.
- c. SNG.
- d. Malignant goitre.

③ This patient present mainly with :

- a. Enlarged cervical L.Ns.
- b. Loss of weight inspite of good appetite.
- c. Dyspnea.
- d. Hard fixed neck mass.

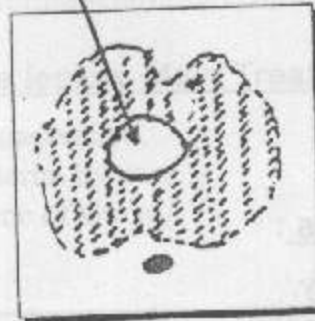
④ The Diagnostic method is :

- a. Neck U/S.
- b. Plain x-ray neck.
- c. Estimation of serum T_3 & T_4 .
- d. Biopsy from nodule.

⑤ The main line of Treatment is :

- a. L.thyroxine.
- b. Total thyroidectomy.
- c. Subtotal thyroidectomy.
- d. Hemi-thyroidectomy.

[B] Cold Nodule



① This x-ray is :

- a. Hot nodule.
- b. Cold nodule.
- c. Warm nodule.
- d. Normal gland.

② The Diagnosis may be Except

- a. Thyroid cyst.
- b. Toxic nodule.
- c. SNG.
- d. Malignant goitre.

③ This patient present mainly with Except

- a. Enlarged cervical L.Ns.
- b. Loss of weight inspite of good appetite.
- c. Dyspnea.
- d. Hard fixed neck mass.

④ The Diagnostic method is :

- a. Neck U/S.
- b. Plain x-ray neck.
- c. Estimation of serum T_3 & T_4 .
- d. Biopsy from nodule.

⑤ The main line of Treatment is :

- a. L.thyroxine.
- b. Total thyroidectomy.
- c. Subtotal thyroidectomy.
- d. Hemi-thyroidectomy.

10

Soft Tissue Mammography



① This x-ray is :

- a. Plain x-ray.
- b. Galactography.
- c. Barium study.
- d. Soft tissue Mammography.
- e. Technetium 99.

② All are +ve Radiological signs.:

- a. Mass of Breast.
- b. Nipple Retraction.
- c. Hypervascularity.
- d. All of the above.

③ Patient presents with all, Except :

- a. Bleeding per nipple.
- b. Axillary L.Ns
- c. Skin Manifestations.
- d. Pain related to menses.

④ All are possible complications :

- a. Pathological fractures.
- b. Mass at root of neck.
- c. Haemoptysis.
- d. All of the above.

⑤ The Diagnostic procedure is :

- a. Galactography.
- b. Biopsy.
- c. Chest x-ray.
- d. None of above.

⑥ The 1st line of Treatment :

- a. Simple Mastectomy.
- b. Radiotherapy.
- c. Radical Mastectomy.
- d. Excisional biopsy.

11

Arteriography

IAI Narrowing & Irregularity of Aorta &
both C.I.A. & E.I.A due to Atherosclerosis



① This x-ray is :

- a. Aortography.
- b. I.V.P.
- c. X-ray Abdomen.
- d. None of Above.

② The dye used is :

- a. Myodil.
- b. Hypaque (urografine).
- c. Barium.
- d. None.

[Miscellaneous X-Rays]

93

③ The possible Aetiology is :

- a. Atherosclerosis.
- b. Burger's disease.
- c. Raynaud's phenomena.
- d. Diabetic foot.

④ Patient manifested mainly with :

- a. Chronic foot ulcer.
- b. Pain on walking.
- c. Impotence.
- d. None of the above.

⑤ Treatment could be, Except :

- a. Conservative.
- b. Arterial by pass.
- c. Lumbar sympathectomy.
- d. Thrombo-end-arterectomy.

⑥ In this lesion, Main Treatment is :

- a. Conservative.
- b. Arterial by pass.
- c. None of above.

IBI Lt. common Iliac Block



⑦ This x-ray is :

- a. Trans-lumbar Aortography.
- b. Retrograde femoral Aortography.
- c. Ant-brachial Aortography.
- d. D.S.A.

⑧ This x-ray shows :

- a. Abdominal Aorta.
- b. Absent Lt. C.I.A.
- c. Normal Rt. C.I.A.
- d. All of above.

⑨ Treatment is:

- a. Conservative.
- b. By-pass by Dacron or Teflon.
- c. By-pass by Long saphenous.
- d. All of the above.

ICI Rt. superficial femoral artery Block



⑩ This x-ray is :

- a. Trans-lumbar Aortography.
- b. femoral Aortography.
- c. Ante-brachial Aortography.
- d. D.S.A.

⑪ This x-ray shows :

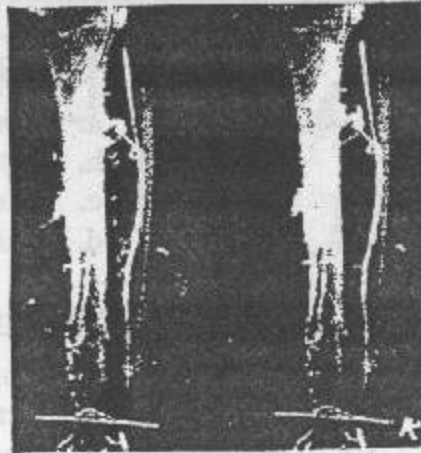
- a. E.I.A normal at Rt. Side.
- b. Abscent Rt. Superficial femoral artery.
- c. Normal profunda femoris.
- d. All of the above.

⑫ Treatment is :

- a. Conservative.
- b. By-pass by Dacron or Teflon.
- c. By-pass by long saphenous.
- d. All of the above.

12

Venography



① This X-ray is

- a. Venography.
- b. Arteriography.
- c. D.S.A.
- d. None of the above.

② The dye used is :

- a. Myodil.
- b. Hypaque (urographin)
- c. Barium.
- d. None of the above.

③ The patient presents with :

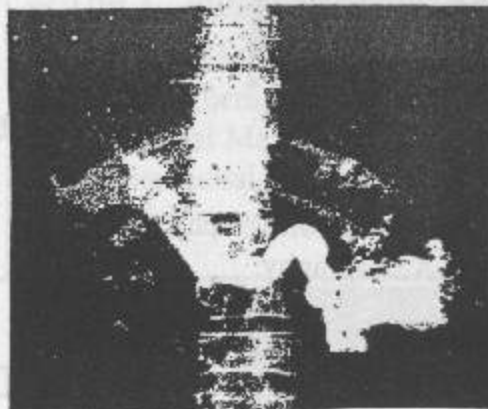
- a. Varicosities.
- b. Claudication pain.
- c. Colour changes of the limb.
- d. All of the above.

④ All are complications, Except :

- a. Rest pain.
- b. leg ulceration.
- c. Dermatitis.
- d. Lower limb odema.

13

Splenoportography



① The dye used is :

- a. Telepaque.
- b. Lipidol.
- c. Barium.
- d. Urographin.

② All are visualized, Except :

- a. Splenic vein.
- b. Portal vein.
- c. Abdominal aorta.
- d. Non of the above

③ The patient presents with :

- a. Portal hypertension.
- b. Haematuria.
- c. Bilateral ischaemia of L.L..
- d. All of the above.

④ All are complications, Except

- a. Haematemesis.
- b. Splenomegally.
- c. Ascitis.
- d. Intestinal obstruction.

14

Fracture Mandible



① The main aetiology :

- a. Congenital.
- b. Traumatic.
- c. Inflammatory.
- d. Neoplastic

② The patient presents with:

- a. Odema of face.
- b. Inability to eat.
- c. Paepable crepitus over mandible.
- d. All of the above.

③ All are complications, except:

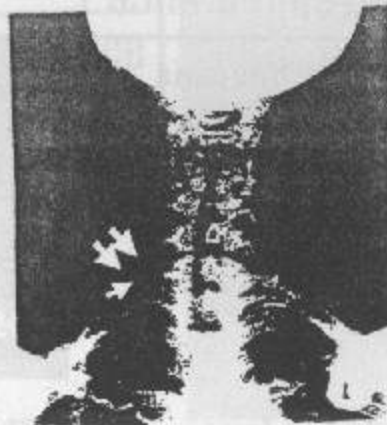
- a. Delayed union of fracture.
- b. Deformity of lower jaw.
- c. Osteomyelitis of the mandible.
- d. Dental cyst.

④ The main line of treatment :

- a. Antibiotics.
- b. Plate and screws.
- c. Mouth wash.
- d. Antiseptic solution.

15

Cervical rib



① The aetiology is :

- a. Congenital.
- b. Traumatic.
- c. Inflammatory.
- d. Neoplasm.

② The patient presents with :

- a. Hard mass at the root of neck.
- b. Weak radical pulse.
- c. Parasthesia & tingling of U.L.
- d. All of the above

③ All are investigations, Except :

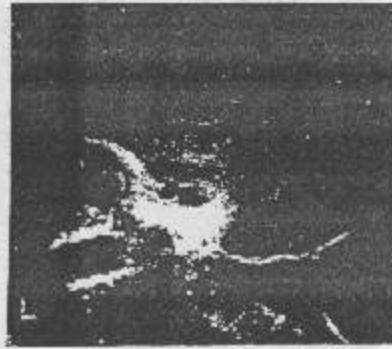
- a. Arteriography.
- b. Nerve conduction test.
- c. EMG
- d. Bone scan.

④ All are line of treatment, Except :

- a. Physiotherapy.
- b. Sympathectomy.
- c. Rib resection.
- d. Laminectomy.

16

Craniostenosis



- | | |
|--|--|
| <p>① <u>The age of patient is :</u></p> <ul style="list-style-type: none"> a. Neonate. b. Infant. c. Child. d. Non of the above. <p>② <u>The accepted diagnosis is:</u></p> <ul style="list-style-type: none"> a. Hydrocephalus. b. Chronic haemolytic anaemia. c. Hyperparathyroidism. d. Microcephaly. | <p>③ <u>The best investigation is :</u></p> <ul style="list-style-type: none"> a. Plain x-ray skull. b. MRI brain. c. CT scan skull. d. Bone scan. <p>④ <u>The principle line of treatment</u></p> <ul style="list-style-type: none"> a. Conservative. b. Cranioplasty. c. Ventriculo-peritoneal shunt. d. Endoscopic ventriculostomies. |
|--|--|

17

Hair on end appearance

i.e. Haemolytic anaemia



- | | |
|---|--|
| <p>① <u>The radiological sign is :</u></p> <ul style="list-style-type: none"> a. Hair on end appearance. b. Salt and pepper appearance. c. Acromegally. d. Silver beaten appearance. <p>② <u>The possible aetiology is :</u></p> <ul style="list-style-type: none"> a. Pituitary tumors. b. Haemolytic anaemia. c. Meningitis. d. Hyper parathyroidism. | <p>③ <u>The patient presents with :</u></p> <ul style="list-style-type: none"> a. Bone aches. b. Headache. c. Splenomegaly. d. Haematemsis. <p>④ <u>The treatment of this case is :</u></p> <ul style="list-style-type: none"> a. Splenectomy. b. Steroids. c. a + b. d. Trephine operation. |
|---|--|

18

Salt and pepper appearance

i.e. Hyperparathyroidism



① This x-ray shows :

- a. Multiple myeloma.
- b. Chronic osteomyelitis.
- c. Multiple osteolytic lesions.
- d. Skull metastasis.

② The radiological sign is :

- a. Ostitis fibrosa cystica.
- b. Salt & pepper appearance.
- c. Onion peel appearance.
- d. Involucrum.

③ The follow laboratory findings are Except :

- a. ↑ Ca level.
- b. ↓ phosphorus level.
- c. ↑ serum uric

④ This condition is commonly associated with :

- a. Malignant transformation.
- b. Chronic osteomyelitis.
- c. Recurrent renal stones.
- d. Stiffness of the knee joint.

19

Silver beaten appearance

i.e. Pituitary Tumor



① The radiological sign is :

- a. Silver beaten appearance.
- b. Ballooning of sella turcica.
- c. a + b.
- d. Hair on end appearance.

② The patient presents clinically with :

- a. Fever & toxemia.
- b. History of trauma.
- c. Headache, vomiting & blurring of vision.
- d. Scalp sinus discharging pus.

③ All are investigations, Except :

- a. CT scan.
- b. MRI brain.
- c. Lumbar puncture.
- d. Cerebral angiography.

④ All are possible complications, Except

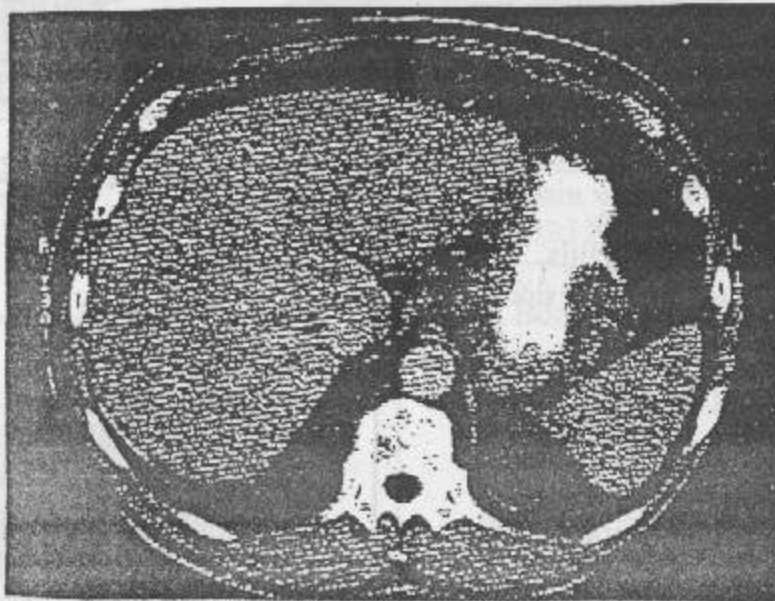
- a. Blurring of vision
- b. Projectile vomiting.
- c. Meningitis.
- d. Brain stem compression.

20

CT Scan & MRI

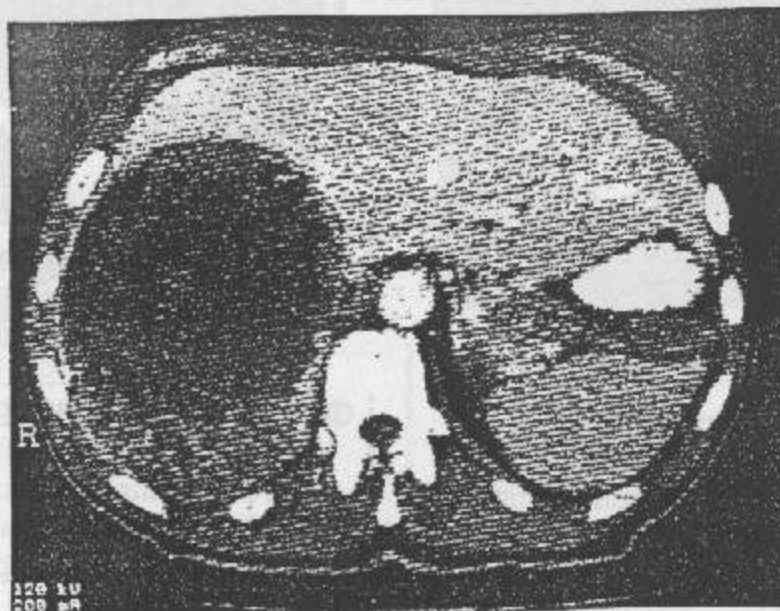
G.I.T.

[A] CT cancer stomach :



See questions page (16)

[B] CT Hepatoma :



① All the following organs seen, Except

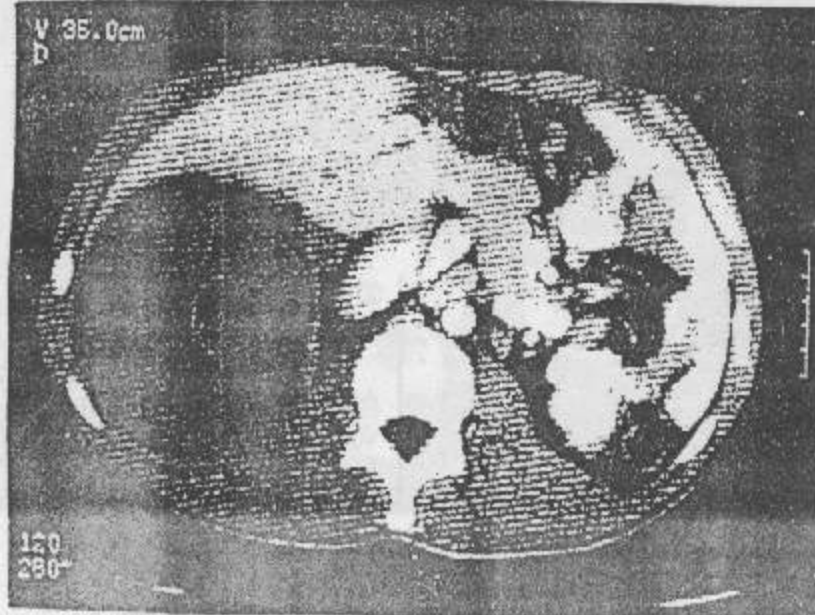
- a. Liver.
- b. Spleen.
- c. Urinary bladder.
- d. Stomach

② The pathology present is :

- a. Hepatoma.
- b. Cancer stomach.
- c. Renal carcinoma.
- d. Aortic aneurysm.

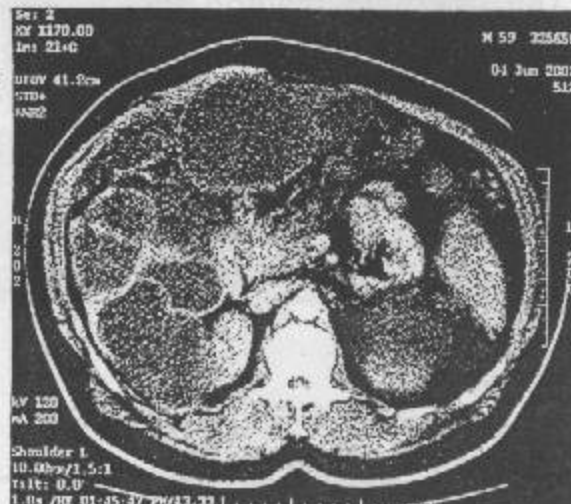
- | | |
|--|---|
| <p>③ The patient present with, Except</p> <ul style="list-style-type: none"> a. Haematuria. b. Jaundice. c. Ascites.. d. Rt. hypochondrial mass. | <p>④ The principle line of treatment is :</p> <ul style="list-style-type: none"> a. Hepatic resection. b. Nephrectomy. c. Chemotherapy. d. None of the above. |
|--|---|

[C] CT Hydatid cyst :

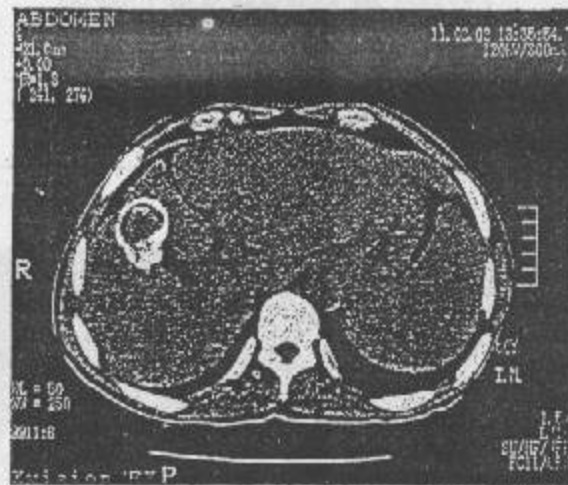


- | | |
|--|---|
| <p>① The type of study is :</p> <ul style="list-style-type: none"> a. M.R.I abdomen. b. CT scan abdomen. c. Barium study. d. None of above. <p>② The vertebral column is :</p> <ul style="list-style-type: none"> a. Normal disc. b. Disc prolapse. c. Fracture spine. d. Non of the above | <p>③ The study shows :</p> <ul style="list-style-type: none"> a. Cancer stomach. b. Cancer pancreas. c. Renal neoplasm. d. Liver cyst. <p>④ The urea level shows :</p> <ul style="list-style-type: none"> a. < 20 mg%. b. 20 – 40 mg%. c. > 100mg%. d. None of the above. |
|--|---|

N.B. Multiple Hydatid cysts



[D] CT Calcified Gall Bladder :



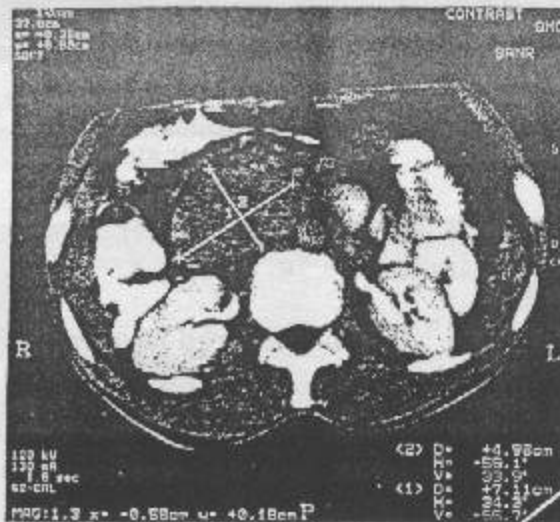
① The study is:

- a. CT abdomen.
- b. MRI spine.
- c. Barium enema.
- d. DSA

② The study shows :

- a. Liver tumor.
- b. Calcified gall bladder.
- c. Calcified R.S.E.
- d. None of the above.

[E] CT Cancer Head Pancreas :



① The Accurate method for diagnosis:

- a. ERCP.
- b. MRI.
- c. CT scan.
- d. a + c.

③ All are investigations, Except :

- a. Serum bilirubin.
- b. Serum amylase.
- c. Serum creatine.
- d. None of above.

② The patient presents will all, Except :

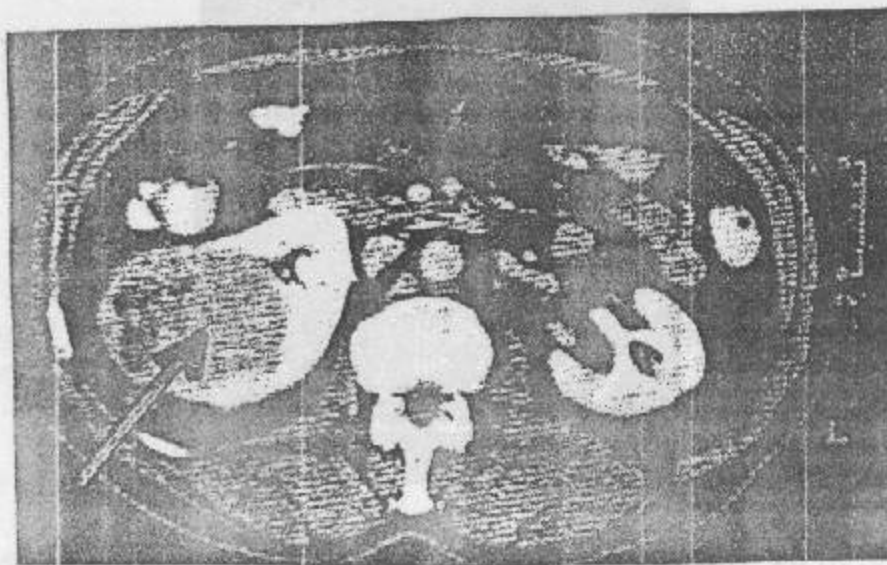
- a. Streatorrhoea.
- b. Pruritis.
- c. Dark urine.
- d. Pain at Lt. iliac fossa.

④ The treatment is :

- a. Radiotherapy.
- b. Radical gastrectomy.
- c. Chemotherapy.
- d. Partial pancreatic-duodenectomy.

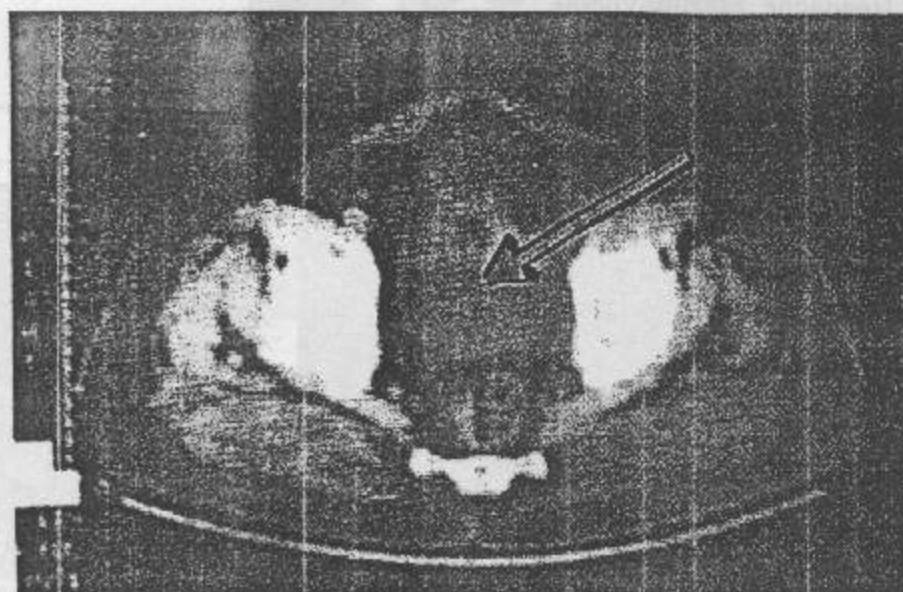
Urinary System

[A] CT Hypernephroma:



See questions page (49)

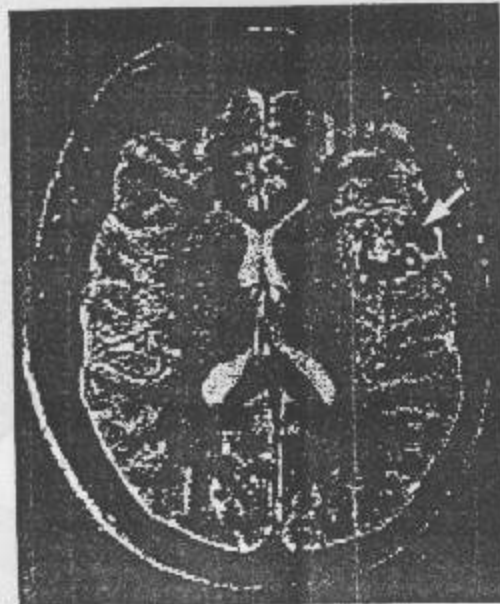
[B] CT cancer urinary bladder :



See questions page (51)

C.N.S.

[A] CT Brain Tumor :



① All may be, Except

- a. Pituitary tumor.
- b. Extradural haematoma.
- c. Cerebral metastasis.
- d. Fracture base.

② The patient present with :

- a. Fever & toxemia.
- b. Headache, blurring vision.
- c. History of trauma.
- d. Scalp sinus discharging pus.

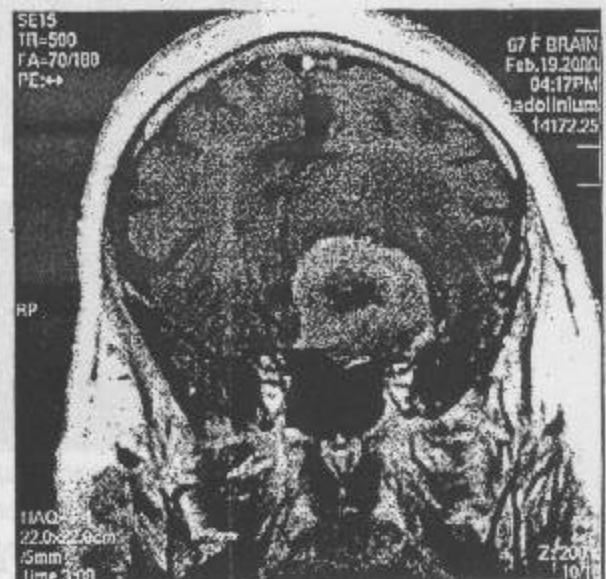
③ All are complications, Except :

- a. Blurring of vision.
- b. Projectile vomiting.
- c. Meningitis.
- d. Brain stem conization.

④ All are Investigations, Except :

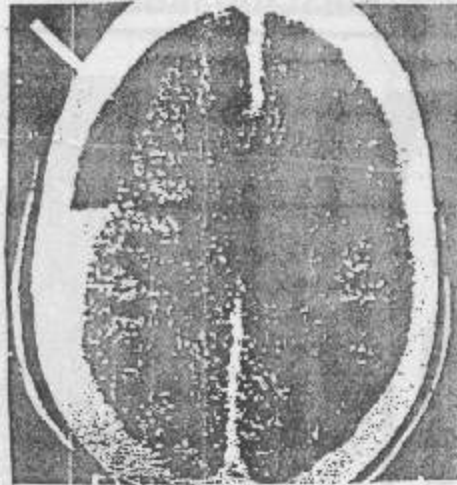
- a. CT scan.
- b. MRI
- c. Lumbar puncture.
- d. Cerebral angiography.

[B] MRI Brain Tumors:



Same questions as above

[C] CT Extra-dural Haematoma :



① The type of study is :

- a. CT brain.
- b. Ventriculography.
- c. MRI.
- d. None of above.

② The study shows :

- a. Dilatation of cerebral ventricle.
- b. Extradural haematoma.
- c. Fracture base.
- d. Intra cerebral Hge.

③ The presents with by :

- a. Concussion.
- b. Lucid interval.
- c. Compression.
- d. All of the above.

④ The treatment is :

- a. Urgent exploration.
- b. Cranioplasty.
- c. Ventriculo-caval shunt.
- d. None of the above.

[D] CT Hydrocephallus



① The type of study is :

- a. CT brain.
- b. Ventriculography.
- c. MRI.
- d. None of above.

② The study shows :

- a. Dilatation of cerebral ventricle.
- b. Extradural haematoma.
- c. Fracture base.
- d. Intra cerebral Hge.

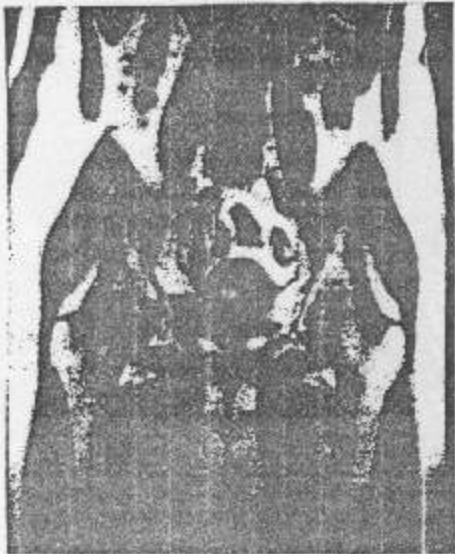
③ The aetiology could be:

- a. Congenital.
- b. Traumatic.
- c. Inflammatory.
- d. Neoplastic.
- e. All of the above.

④ All are treatment, Except :

- a. Ventriculo-peritoneal shunt.
- b. Ventriculo-caval shunt.
- c. Cranioplasty.

Musculoskeletal



MRI shows :
Avascular necrosis of head of femur



MRI shows
Ewing's Sarcoma

Osteosarcoma



The MRI shows
the extent of the lesion.

MRI

Disc prolapse



MRI

CT Soft Tissue Carcinoma



Answers



1 Fracture of the Ribs [Flail Chest]

1. d 2. b 3. e 4. d 5. e 6. c 7. a 8. e 9. c 10. e

2 Haemothorax

1. d 2. d 3. d 4. e 5. c 6. a

3 Tension Pneumothorax

1. c 2. d 3. c 4. c 5. a 6. b

4 Fissure Fracture (Skull)

1. a 2. a 3. c 4. b 5. a 6. c

5 Depressed Fracture (Skull)

1. b 2. a 3. d 4. b 5. c 6. b

6 Submandibular salivary stone

1. c 2. c 3. d 4. d 5. a 6. a

7 Parotid Sialography

1. a 2. a 3. d 4. d 5. d 6. d

8 Bone Scan

1. b 2. c 3. c 4. d 5. a 6. d

9 Thyroid Scan

(A) 1. a 2. b 3. b 4. c 5. d

(B) 1. b 2. b 3. b 4. d 5. b

10 Soft Tissue Mammography

1. d 2. d 3. d 4. d 5. b 6. d

11 Arteriography

1. a 2. b 3. a 4. b 5. c 6. a

7. a 8. d 9. b

10. b 11. d 12. c

12

Venography

1. a

2. b

3. a

4. a

13

Spleno-protography

1. d

2. c

3. a

4. d

14

Fracture mandible

1. b

2. d

3. d

4. b

15

Cervical Rib

1. a

2. d

3. d

4. d

16

Craniostenosis

1. a

2. d

3. a

4. b

17

Hair on end appearance

Haemolytic anaemia

1. a

2. b

3. c

4. c

18

Salt & pepper appearance

Hyperparathyroidism

1. c

2. b

3. c

4. c

19

Silver beaten appearance

Pituitary tumor

1. c

2. c

3. c

4. c

20

CT scan & MRI

G.I.T.

[A] CT cancer stomach

[B] CT Hepatoma

1. c

2. a

3. a

4. a

[C] CT Hydatid cyst

1. b

2. a

3. d

4. b

[D] CT Calcified gall bladder

1. a

2. b

[E] CT Cancer head pancreas

1. d

2. d

3. b

4. d

Urinary System

[A] CT hypernephroma

[B] CT cancer urinary bladder

CNS

[A] CT brain tumors :

a. d

2. b

3. c

4. c

[B] MRI brain tumors :

Same questions

[C] CT extradural haematoma :

1. a

2. b

3. d

4. a

[D] CT hydrocephalus :

1. a

2. a

3. e

4. c

GOOD LUCK

Dr. Wael Metwaly